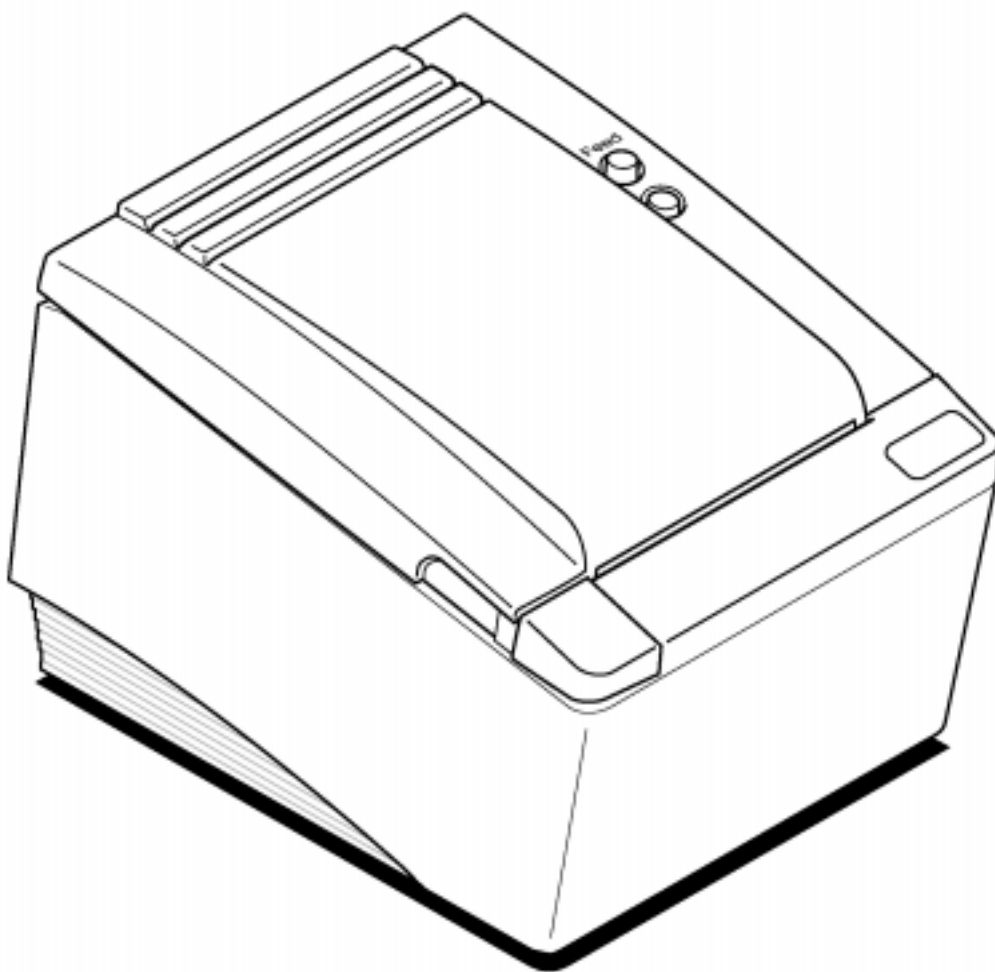
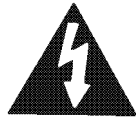


MAINTENANCE MANUAL





CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



CAUTION:

**TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE BOTTOM OF PRINTER
NO USER - SERVICEABLE PARTS INSIDE**

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

WARNING: To prevent fire or shock hazard, do not expose this printer to rain or moisture.

Disclaimer

Information in this publication is subject to change without notice. However, as product improvements become available, Oki Europe will make every effort to provide updated information for the products described in this publication.

Oki Europe cannot guarantee that changes in software and equipment made by other manufacturers, and referred to in this publication, do not affect the applicability of the information in this publication.

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Revision A, April 1999

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Federal Communications Commission Radio Frequency Interference Statement

The OKIPOS 80 Plus III Printer complies with the limits for a Class A computing device in accordance with the specifications in Part 15 of FCC rules which are designed to minimise radio frequency interference during installation; however, there is no guarantee that radio or television interference will not occur in any particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on while the radio or television is on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient the radio or television receiving antenna;
- ◆ Relocate the printer with respect to the receiver; and/or
- ◆ Plug the printer and receiver into different circuits.

If necessary, the user should consult their dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: *How to Identify and Resolve Radio/TV Interference Problems*.

This booklet is available from the US Government Printing Office, Washington, DC 20402. Ask for stock number 004-000-00345-4.

UL, CSA, VDE, CE Statement

Oki Europe POS printers are UL and CSA Listed, VDE Certified, and carry the CE Mark.

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PRODUCT INFORMATION

WHAT IS IN THIS BOOK?

WHO SHOULD READ THIS BOOK?

This book is intended for trained, service technicians.

WHAT DOES IT COVER?

This book only covers the OKIPOS 80 Plus III Printer, not the entire point-of-sale system, but it will tell you all you need to know about properly maintaining and servicing the printer. You will learn how to clean, test, and disassemble the printer.

This book also provides some general and technical information about the printer, so you will know what the features are, how reliable it is, and what its printing capabilities are.

WHERE CAN YOU FIND MORE INFORMATION?

A *Programmer's Guide* is available if you need to know how to program a point-of-sale terminal or a personal computer to work with the printer. It describes all the commands the printer recognises to perform its functions.

An *Operator's Guide* is also available and is written for new and experienced operators. It covers setting up and using the OKIPOS 80 Plus III Printer with any point-of-sale system.

For information about ordering these books, refer to the next section.

CONTACTING OKI

Contact your dealer first for general information about the OKIPOS 80 Plus III Printer and how it works with your system. If you need more specific information about the printer, you may contact Oki directly.

The Sales and Technical Support Departments will be able to help you with most of your questions. Contact the Technical Support Department to receive technical support, order documentation, receive additional information about the OKIPOS 80 Plus III Printer, learn more about your warranty, or if you need to send a printer in for service. To order supplies, or to receive information about other products by Oki, contact the Sales Department.

You can reach both the Sales and Technical Support Departments of your local office by accessing the Oki Europe Web site for the most up-to-date contact details.

www.okieurope.com

WARRANTY INFORMATION

OPTIONS

The OKIPOS 80 Plus III printer does not have any fittable options. The printer is available in either Serial or Parallel form in light or dark grey cabinets. The printer can be ordered with or without power supply.

Please contact your dealer or local country Oki Office to enquire about customisation of the standard product.

SERVICE INFORMATION

If you need a printer serviced, whether it is under warranty or not, call your dealer. You may have several options for service depending on your contract. Your dealer may service the printer directly or have a service agreement with a local service contractor.

If your dealer instructs you to send the printer to Oki for service or if you bought the printer directly from Oki, contact your local country technical support department, and ask for a return authorisation. Please have the printer's model and serial numbers available. The numbers are on a decal located on the bottom of the printer.

You will need to repack the printer and ship it directly to your Oki dealer or distributor. Be sure to keep the original packing materials and box. Please refer to "Unpacking the Printer" in the *Operator's Guide*.

ORDERING SUPPLIES

You may order supplies by calling your Oki dealer

You may order paper and/or cables.

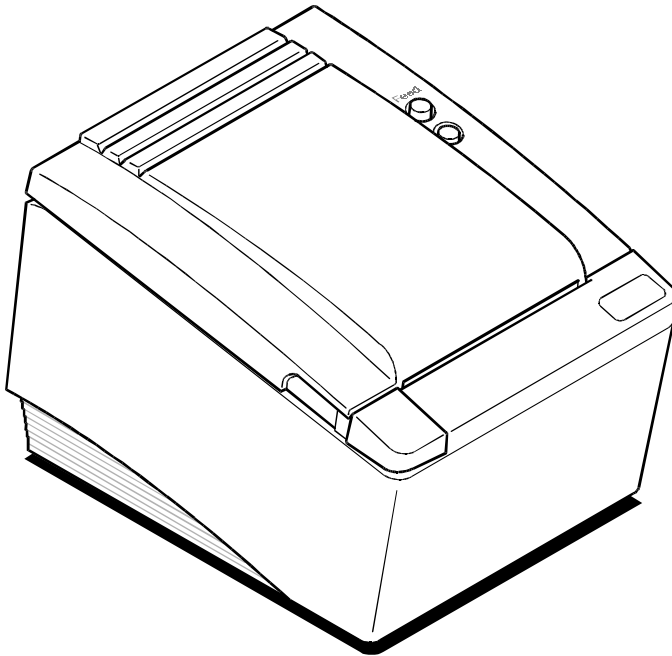
PAPER

Paper	Type	Dimensions
Receipt paper	Thermal	80 mm (3.15 inches) wide 100 mm (4.00 inches) diameter 128 mm (420 feet) length

CABLES

Cables
110V Power cable
240V Power cable
230V Power cable
Parallel Communication Cable 25-pin male to 25-pin male
Serial communication cable PC, 9-pin female to 9-pin female PC, 9-pin female to 25-pin female

DESCRIPTION OF THE OKIPOS 80 PLUS III PRINTER



The OKIPOS 80 Plus III Printer is a stand-alone, 40-column, thermal printer. The OKIPOS 80 Plus III Printer performs high-speed receipt printing in a point-of-sale environment.

OKIPOS 80 PLUS III THERMAL RECEIPT PRINTER

The OKIPOS 80 Plus III is a thermal receipt printer used for applications requiring high-speed extensive graphics printing.

- ◆ 31.8 lines per second of text at 6 lines per inch
- ◆ 42.5 lines per second of text at 8 lines per inch
- ◆ 5.3 inches per second of graphics
- ◆ 48 watt power supply

STANDARD FEATURES

The following features and items are standard on the OKIPOS 80 Plus III Printer:

- ◆ 44-column printing at 15.6 characters per inch
- ◆ 4.0 inch diameter thermal paper roll 128 m (420 feet) per roll
- ◆ Automatic cutter (partial cut)
- ◆ Easy paper load
- ◆ High resolution graphics capability (8 dots per mm)
- ◆ RS-232C serial interface with 8K buffer
- ◆ Configurable receive and image buffer areas
- ◆ Paper out sensor
- ◆ Operator controlled self-test
- ◆ Dual cash drawer connectors (RJ11) and drivers (24V, 1.2 amp pulse for approximately 150 ms; drawer open/closed status reporting)
- ◆ Characters and graphics
 - Print speed - 135 mm (5.3 inches) per second - text
 - Paper slew speed - 135 mm (5.3 inches) per second
 - Wide print zone - 72 mm (2.83 inches)
 - 8 dots per mm (203 dpi) horizontal and vertical
- ◆ Reverse video and rotated on the same line

OPTIONAL FEATURES

The optional features either replace a standard feature or enhance the operation of the printer. All optional features are installed at the factory and must be selected when the printer is ordered.

- ◆ IEEE 1284 bidirectional parallel
- ◆ Custom colors and logo
- ◆ Internal buzzer (for kitchen applications)

TECHNICAL SPECIFICATIONS

PRINTING SPECIFICATIONS

- ◆ Printing method: Direct thermal
- ◆ Print zone: 72 mm (2.83 in.) wide

PRINT CHARACTERISTICS

The OKIPOS 80 Plus III Printer prints characters in a variety of pitches as shown in the following table and print samples. All pitches are scaleable up to 64 times as large as the standard size.

For information about programming the printer to print a particular pitch or style, please refer to the *Programmer's Guide*. You may obtain the guide free of charge in electronic format from your Oki Dealer.

Pitch (characters per inch)	Maximum Characters per Line
15.6	44
20.3	57

20.3 CPI UTL

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

15.6 CPI UTL

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

20.3 CPI Emphasized

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

15.6 CPI Emphasized

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

7.8 CPI UTL Db1-width/height

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

7.8 CPI UTL Db1-width

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

10.1 CPI UTL Double-width

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

10.1 CPI UTL Db1-width/height

!"#\$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN_{OP}QRSTU_{VW}
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ ÇüéäääääçëëëïïïÅÆ_æ
Æððððüýöüø£¥¦§¨ª«¬®¯°±²³´µ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅ
ÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ
òóôõö÷øùúûüýþÿ

RELIABILITY

- ◆ Mean time between failure: 94,000 hours at 12.5% ratio
- ◆ Mean cycles between failure: 16,000,000 print lines
- ◆ Mean time to repair: 15 minutes
- ◆ Cutter: 1,000,000 cut life

DIMENSIONS

- ◆ Width: 152 mm (6.0 in.)
- ◆ Length: 216 mm (8.5 in.)
- ◆ Height: 142 mm (5.6 in.)

WEIGHT

- ◆ Approximate weight: 4 pounds

POWER REQUIREMENTS

The OKIPOS 80 Plus III is designed to be AC powered in domestic and international markets. The printer is equipped with an external universal input power supply that is designed to operate world-wide without modification.

Supply Voltage Rating (VAC)	Supply Voltage Range (VAC)	Frequency (Hz)	Rated Power (watts)	Current Idle (amps)	Current Printing (amps)
100 - 240	90 - 264	47 - 63	48 (min.)	0.09 @ 120VAC 0.045 @ 240VAC	0.5 @ 120VAC 0.25 @ 240VAC

ENVIRONMENTAL CONDITIONS

The printer will run at its best when stored and operated in an environment that meets the following temperature and humidity conditions:

- ◆ Operating temperature: 0° to 40°C (32° to 104°F)
- ◆ Storage temperature: -10° to +60°C (-14° to +140°F)
- ◆ Operating relative humidity: 10% to 90% (non-condensing)
- ◆ Storage relative humidity: 5% to 90%

COMMUNICATION INTERFACES AND CASH DRAWER CONNECTORS

SERIAL CABLE

Cable Requirements

The OKIPOS 80 Plus III Printer standard configuration requires an RS-232C shielded cable, no more than 50 feet long. The cable must be UL and CSA approved.

RS-232C Communication

The RS-232C interface uses the following protocol and communication characteristics:

- ◆ Up to 19.2K baud
- ◆ Up to 8K buffer
- ◆ Ready/Busy or XON/XOFF protocol
- ◆ Communications diagnostic mode

Pin Assignments for 9-pin Printer Connector

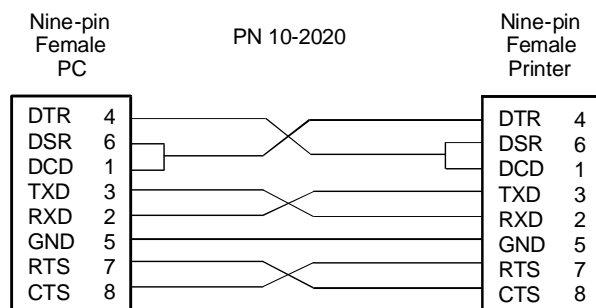
Pin	Name	Description
1	DCD	Data carrier detect
2	RX	Receive data
3	TX	Transmit data
4	DTR	Data terminal ready
5	GND	Signal ground
6	DSR	Data set ready
7	RTS	Request to send
8	CTS	Clear to send
9	SSD	Secondary data

Serial Cable Configurations

The following cable configurations are for different host requirements.

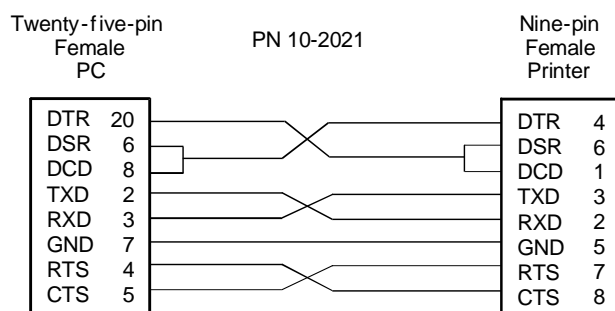
Serial PC to OKIPOS 80 Plus III (Null Modem)

This Cable should be used to connect OKIPOS 80 Plus III printers to PC's or PS/2's with 9-pin serial ports.



Serial AT to OKIPOS 80 Plus III (Null Modem)

This cable should be used to connect OKIPOS 80 Plus III printers to PC's or PS/2's with 25-pin serial ports.



PARALLEL CABLE

Cable Requirements

The OKIPOS 80 Plus III Printer parallel option requires a 25-pin male D-shell connector at the printer.

Pin Assignments

Pin(s)	Signal	Description	Direction
1	STROBE	Clock data to printer	Host to Printer
2-9	D0 - D7	Data	Host to Printer
10	ACK\	Printer accepted data	Printer to Host
11	BUSY	Printer busy	Printer to Host
12	PE	Paper out/status	Printer to Host
13	SLCT	Printer selected	Printer to Host
14	AUTOFD	Autofeed paper	Host to Printer
15	ERR\	Printer error	Printer to Host
16	INIT\	Initialize the printer	Host to Printer
17	SLIN	Select printer	Host to Printer
18-25	GND	Ground	

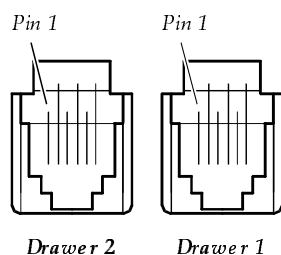
CASH DRAWER PIN ASSIGNMENTS

Adapters are available for connecting cash drawers equipped with BNC style connectors (the standard is a modular, telephone style connector). Cash drawer connections to emulate Axiohm or Epson are standard. Adapters to emulate Ithaca must be ordered with the printer.

Epson/Axiohm

Cash Drawer	J7 3-4* Pin #	J7 1-2* Pin #	Epson/Axiohm
1	1	1	Frame Ground
	2	2	Drawer Drive - (Ground)
	3	3	Status Switch +
	4	4	Drawer Drive + (24V Switched)
	5		Ground
		5	No Connect
	6	6	Status Switch - (Ground)
2	1	1	Frame Ground
	2		No Connect
		2	Ground
	3	3	Status Switch +
	4	4	Drawer Drive + (24V Switched)
	5	5	Drawer Drive - (Ground)
	6	6	Status Switch - (Ground)

*This jumper is for compatibility with earlier Epson printers. Pins 3-4 are the default configuration for these jumpers.



Caution: Do not connect a telephone line to the cash drawer connector, otherwise the printer and telephone line may be damaged.

CLEANING AND ADJUSTMENTS

CLEANING THE PRINTER

Cleaning the printer occasionally and keeping it well maintained will help it to last longer and run better. Remove paper dust periodically by using a vacuum cleaner or air compressor.

Caution: Do not use rubbing alcohol or petroleum-based chemicals to clean the printer as these will damage the plastic parts. Take special care not to get any cleaner on the electronic components.

None of the internal parts of the printer require lubrication or routine maintenance. Apply a common cleaner such as fantastik® or Formula 409® to a damp cloth and gently wipe the surface of the printer.

CLEANING THE THERMAL PRINT HEAD

Under normal conditions the thermal print head does not need cleaning. However, if the print characters are not printing correctly, wipe the thermal print head with alcohol and a lint free cloth.

Caution: Do not get any alcohol on any of the other parts of the printer mechanism or cabinetry.

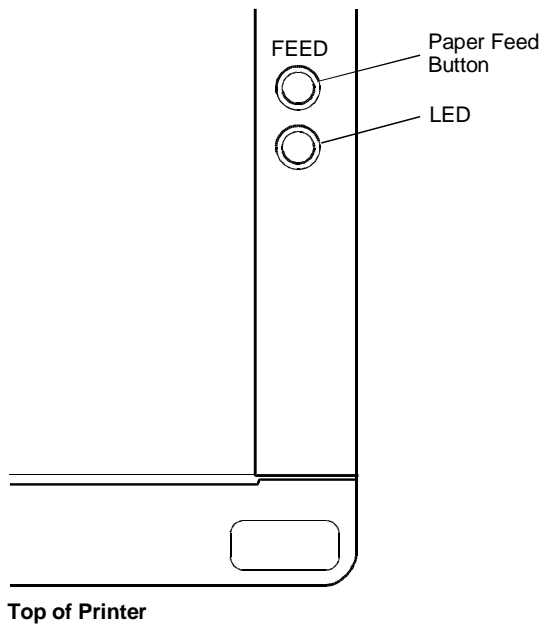
MAKING ADJUSTMENTS

The OKIPOS 80 Plus III Printer does not require any adjustments for normal operation.

TESTING THE PRINTER

The OKIPOS 80 Plus III Thermal Printer has the ability to print self-test printouts on command at power-up. The self-test prints a variety of information about operating settings and configurations.

OPERATING THE KEYPAD



The keypad contains one button and one status LED for easy operation of the printer.

STATUS LED

There is a single status LED to display on-line and error conditions. The table below describes the types of error conditions possible and patterns that the LED will flash under those conditions.

Error Code Diagnosis Description

The OKIPOS 80 Plus III thermal printer uses a single status LED to display on-line and error conditions. The table below describes the types of error conditions possible and the patterns that the LED will flash for those conditions.

Key to Graphical Representation:

- = LED is ON for 0.5 second
- = LED is ON for 0.1 second
- _ = LED is OFF for 0.5 second
- _ = LED is OFF for 0.1 second

IN ORDER OR PRECEDENCE

<u>Error Condition Present Description</u>	<u>Graphical Representation</u>	<u>Verbal</u>
QSM RAM ERROR	_____ • _ • _ • _ • _ • _____	7 quick flashes
RAM ERROR	_____ • _ • _____	2 quick flashes
EEPROM VERIFY ERROR	_____ • _ • _ • _ • _ • _____	6 quick flashes
CHECKSUM VERIFY ERROR	_____ • • • • • _____	5 quick flashes
THERMAL HEAD OVERHEAT continuous	_____ • _ • _ • _ • _ • _____	rapid,
CUTTER ERROR	_____ • _ • _ • _____	3 quick flashes
COVER OPEN	_____ • _ • _ • _ • _ • _____	continuous
PAPER OUT continuous	_____ • • • • • _____ • • • • • _____	slow,

BUTTONS

The printer includes one button that has the following function.

FEED Button

The FEED button advances receipt paper.

TESTING THE PRINTER

You can test the printer to ensure that it is running properly. The sample on the following page shows what a printout of the test may look like. The test pattern varies depending on the printer model and the character set selected when the printer was ordered.

Note: Run the test after loading the paper, but before connecting the printer to a host system. If the characters do not print properly, check to make sure the paper is installed correctly.

If the printer is still not working correctly, contact your dealer.

1. Plug the DC power cord from the external power supply into the printer.
2. Plug the AC power cord into the external power supply.
3. Plug the AC power cord into a grounded three-prong power socket.
4. The status LED will start flashing after approximately 1½ seconds.
5. Open the printer cover.
6. Feed a roll of paper into the printer, leave some paper sticking out and close the paper cover.
7. The printer will print some technical information.
8. To print sample code pages, press the FEED button.

OKIPOS 80 PLUS III THERMAL PRINTER

Identification

Firmware: S038500-03

Emulation Mode

EPSON TM-T88

Language Set

Language Set - 0

RS232 Serial Interface

Baud Rate : 9600 BPS

Data Bits : 8 BITS

Parity : NONE

Stop Bit : 1 BITS

Handshaking : XON/XOFF

Receive Error: Prints '?'

Plug and Play: Enabled

Carriage Return

Ignore CR

Default Line Spacing

6 LPI

Input Buffer Capacity

8192 bytes

User definable Memories

User buffer : 20480 bytes

Page mode buffer: 5.75" length

Non-volatile Memory

50284 bytes remaining

Additional Options

Auto cutter: Enabled

ASSEMBLY/DISASSEMBLY

PRECAUTIONS FOR DISASSEMBLY

Before disassembling any part of the printer, be sure the power is turned off. Disconnect the external power supply, communication cable, and cash drawer cables.

Caution: The controller board can easily be damaged by static electricity. Observe ESD precautions. Wear a grounded wrist strap, and use a static mat or other protected work surface. Do not place the printed circuit boards directly on the printer or floor.

NECESSARY TOOLS

Caution: Using the wrong tools may cause personal injury or damage the printer. Be sure to use the proper tools when maintaining or servicing the printer.

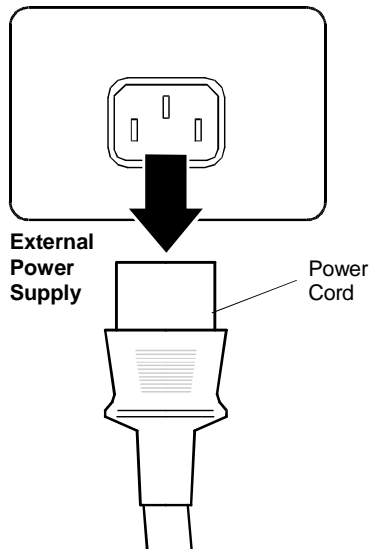
The following list provides the necessary tools to properly maintain the OKIPOS 80 Plus III Printer.

- ◆ Screwdrivers
 - #1 Phillips
 - #2 Phillips
- ◆ Allen hex driver
 - 6.0 inch long shaft
- ◆ Miscellaneous
 - Small needle-nose pliers
 - Ohmmeter
 - Hammer
 - Small punch
 - TNM 1321 cutter-lever removing support fixture

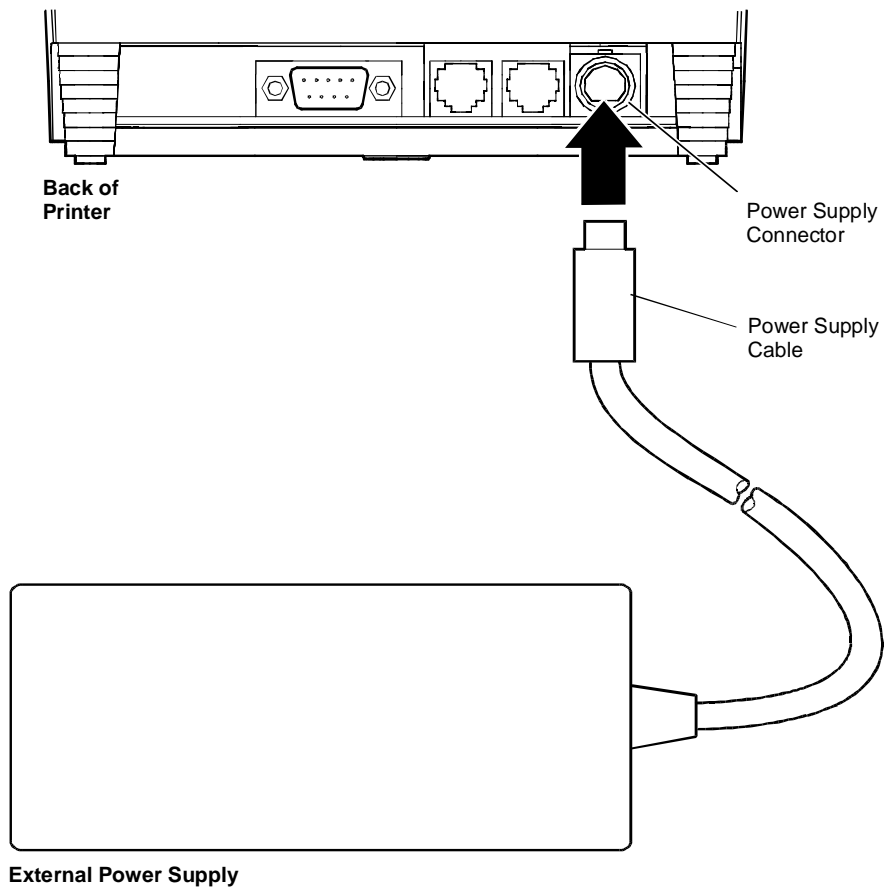
DISCONNECTING THE POWER CORD

Caution: The printer must be grounded through the three-prong power connector.
Do not use a ground-defeating adapter.

1. Unplug the power cord from the grounded three-prong power socket. The printer is off when the LED is no longer green.



2. Disconnect the power cord from the external power supply.

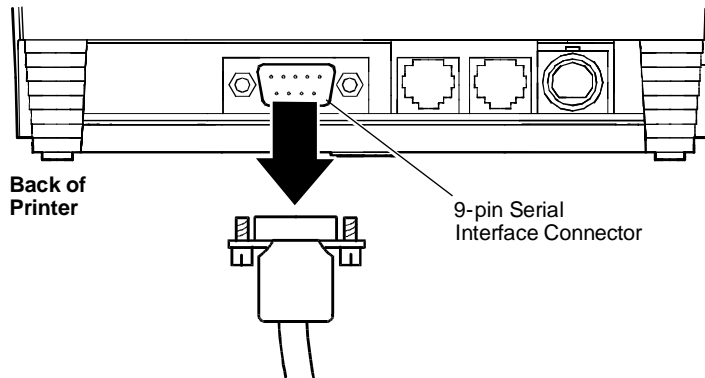


3. Disconnect the external power supply cable from the power supply connector located on the back of the printer. Pull back on the sleeve that surrounds the connector plug, do not pull directly on the cord.

DISCONNECTING THE COMMUNICATION CABLE

Depending on the interface your system uses, either disconnect the serial or parallel communication cable from the appropriate connector on the back of the printer.

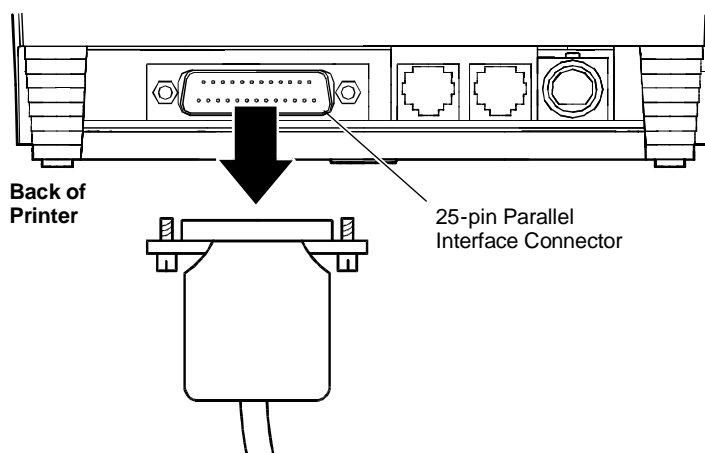
Disconnect the Serial Cable



1. Unplug the AC power cord from the grounded three-prong power socket, and turn the host system or PC off.
2. Loosen the two mounting screws on each side of the cable connector located on the back of the printer.
3. Disconnect the 9-pin serial interface cable from the connector located on the back of the printer.

Refer to page 9 for information on the serial cable requirements.

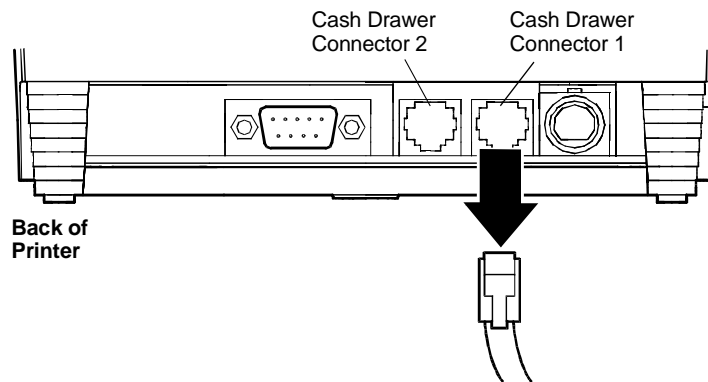
Disconnect the Parallel Cable



1. Unplug the AC power cord from the grounded three-prong power socket, and turn off the host system or PC.
2. Loosen the two mounting screws on each side of the cable connector located on the back of the printer.
3. Disconnect the 25-pin parallel interface cable from the connector located on the back of the printer.

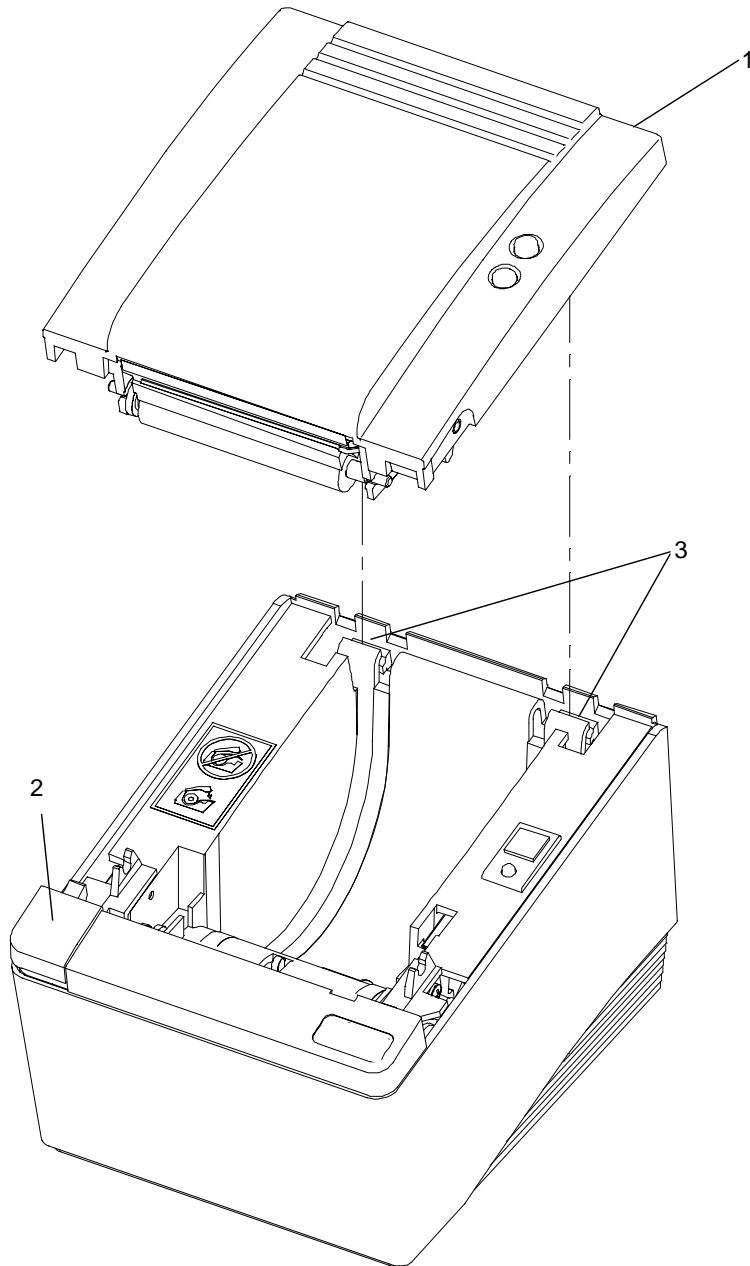
Refer to page 11 for information on the parallel cable requirements.

DISCONNECTING THE CASH DRAWER CABLES



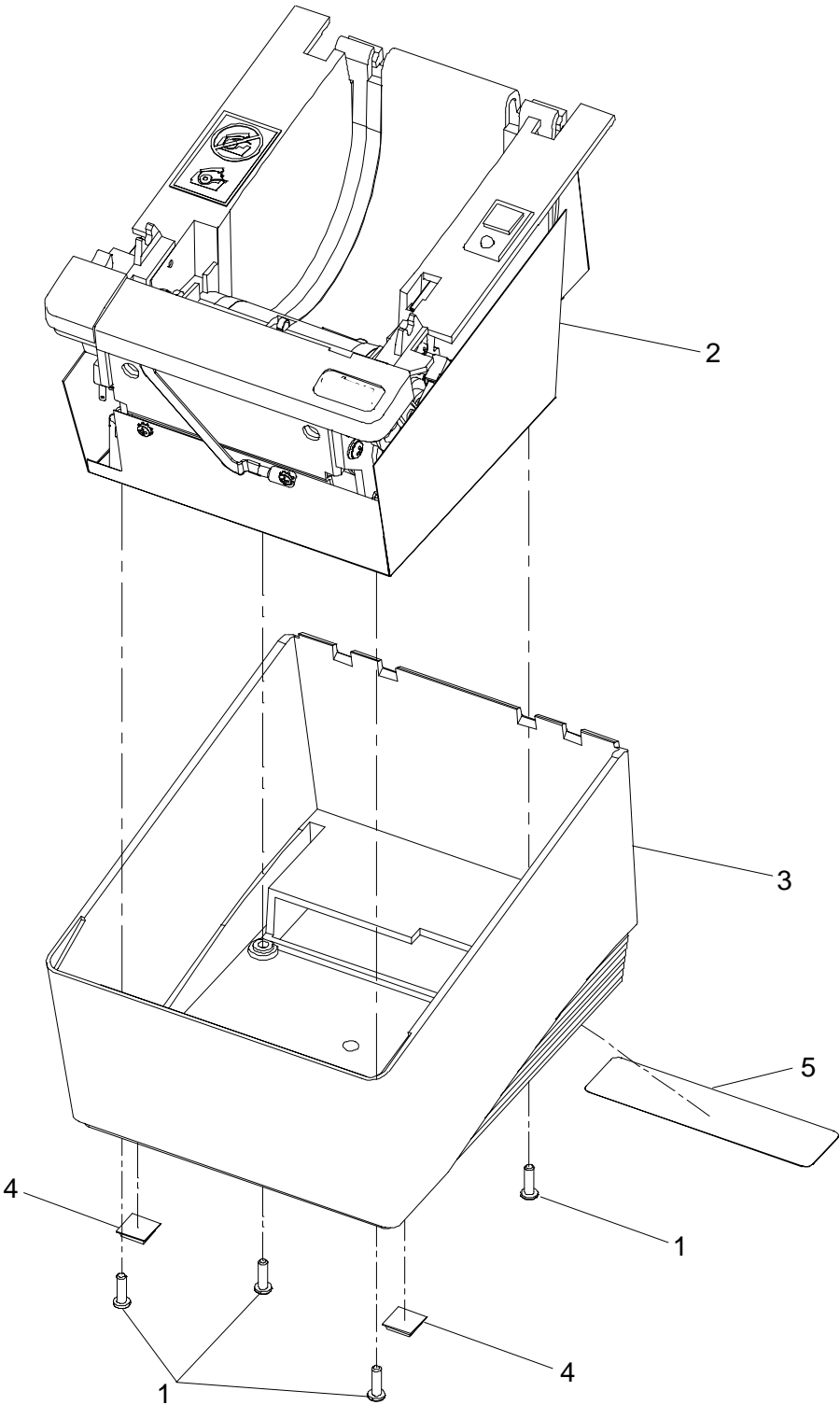
1. Unplug the AC power cord from the grounded three-prong power socket.
2. Disconnect the cash drawer cable from the connectors located on the back of the printer.

REMOVING THE COVER ASSEMBLY



1. Open the cover assembly (1) by pressing down on the cover latch button (2) and lifting the cover assembly until it is fully open.
2. Grasp the cover assembly (1) firmly and lift up slightly to the right until it snaps free from the inner housing hinges (3).

REMOVING THE OUTER HOUSING

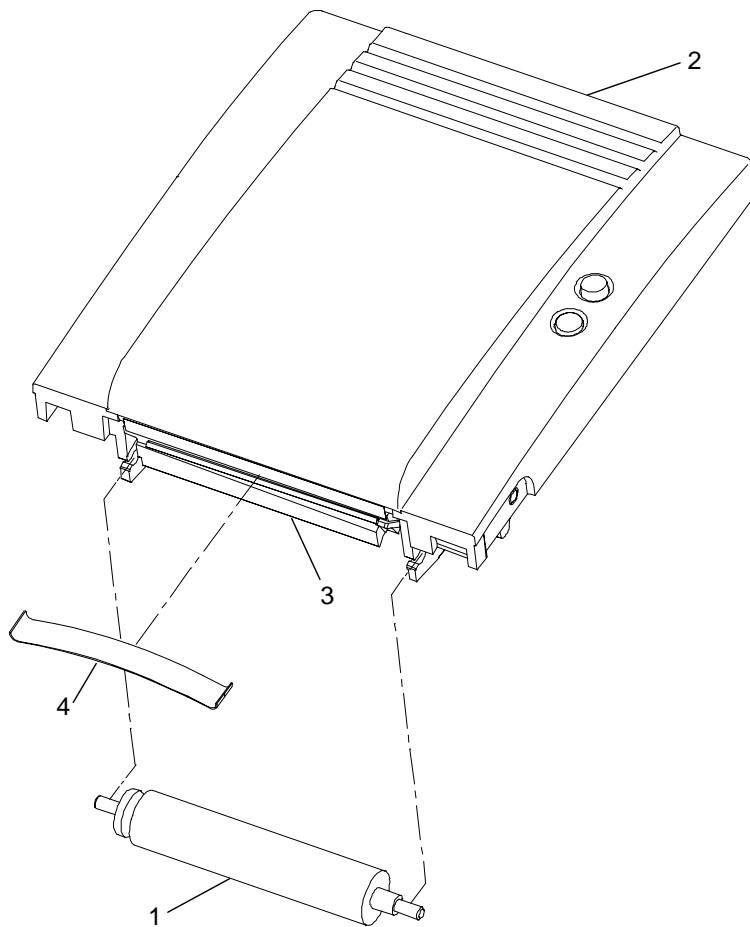


1. Remove the cover assembly. (See page 26).
2. Turn the printer over.
3. Unscrew the four Phillips screws (1) holding the inner housing (2) to the outer housing (3).
4. Lift the printer's inner housing (2) straight out of the outer housing (3).

Note on replacing the outer housing

If you are replacing the outer housing (3), place two new rubber feet bumpers (4) into the two inserts located on the bottom near the front of the printer. Also, replace the serial number label (5).

DISASSEMBLE THE PLATEN



1. Remove the cover assembly. (See page 26).
2. Unsnap the platen/gear assembly (1) from the cover assembly (2).

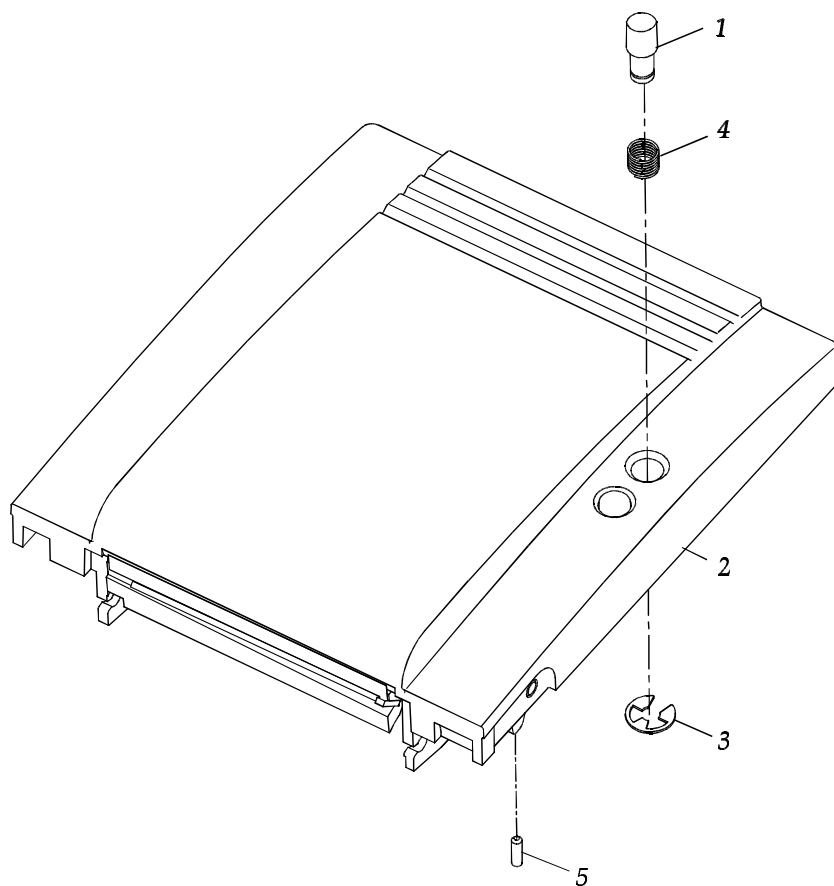
Note: The cutter assembly (3) will hinge forward loosening the cutter spring (4). Be careful not to lose it.

3. Remove the cutter spring (4).

Note on reassembling the platen

Be sure to place the cutter spring (4) in the slot located in the top of the cutter assembly (3) and push up. Insert the platen/gear assembly (1), under the cutter assembly (3), and push up until it can be snapped into the cover assembly (2).

DISASSEMBLE THE COVER



1. Remove the cover assembly. (See page 26).
2. Remove the outer housing. (See page 27).
3. Release the paper feed button (1) from the cover assembly (2) by removing the retaining ring (3).

Note: Hold the button (1) in place in order to avoid the compression spring (4) and button from flying out.

4. Remove the compression spring (4) from the cover assembly (2).
5. Unscrew the 4-40 set flat socket screw (5) using a 0.050-inch hex driver.

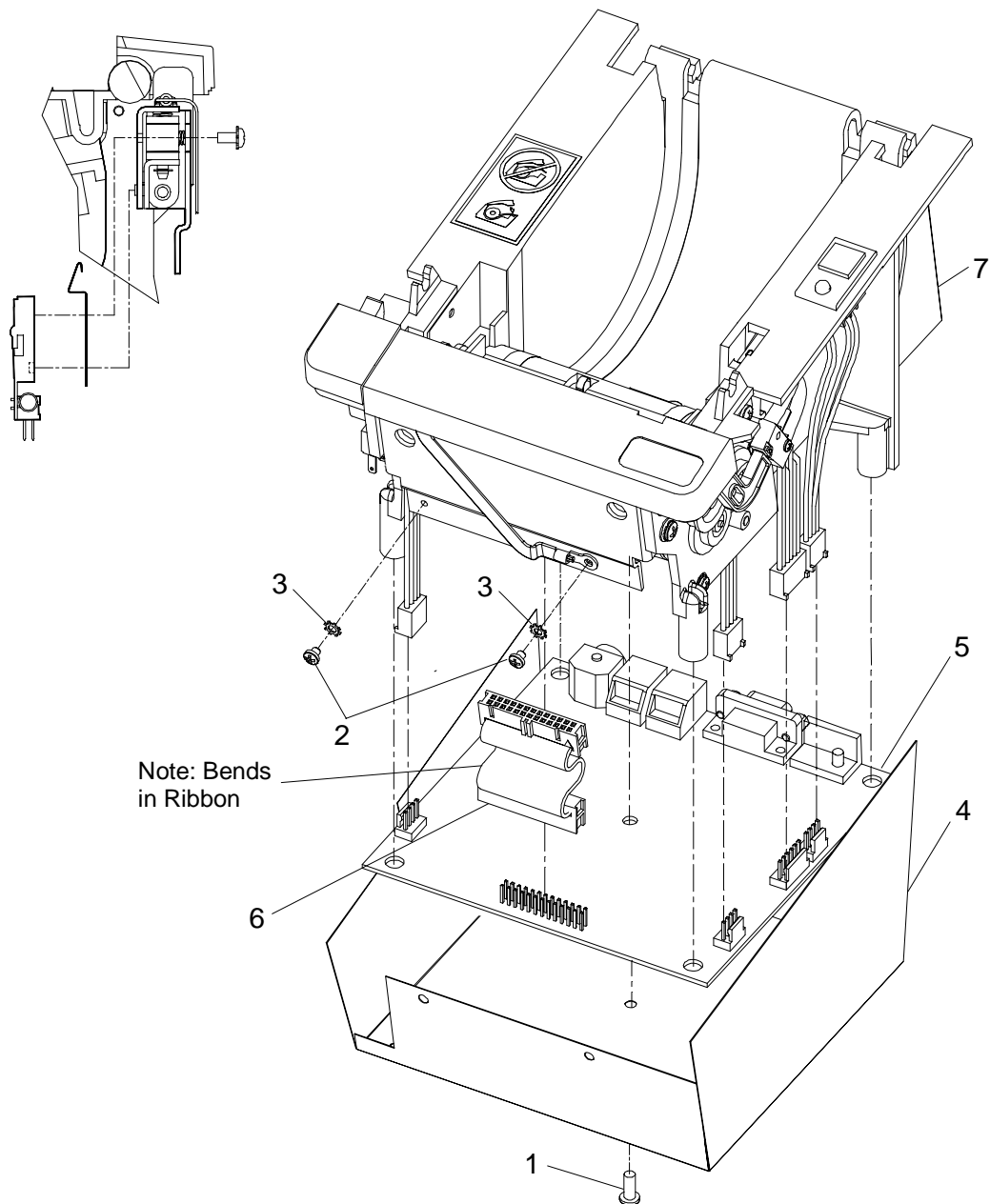
Notes on installing the cover and adjusting the cover open switch

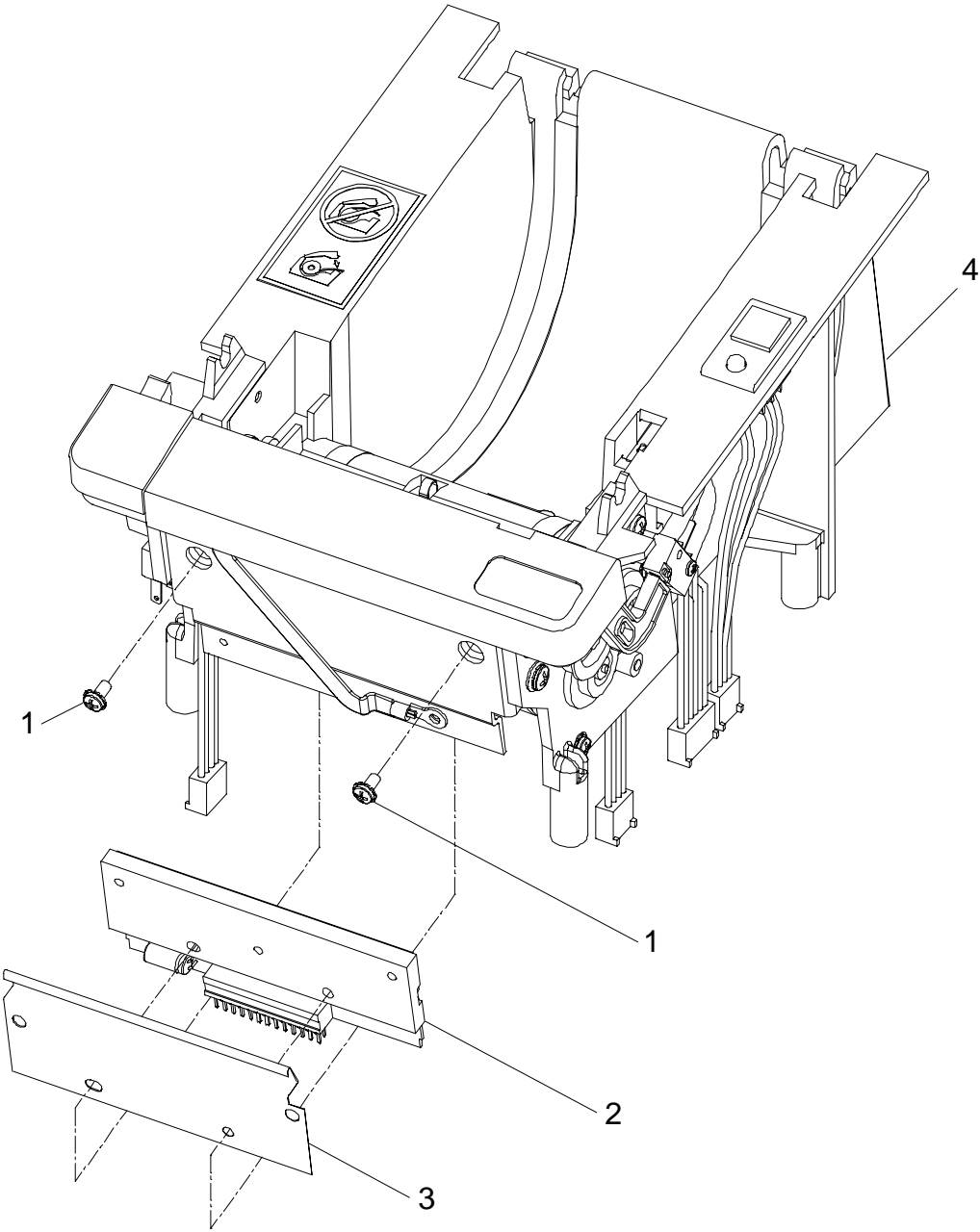
1. Use a 0.050-inch hex driver to insert a 4-40 set flat socket screw (5) into the cover assembly, at its correct location. Refer to the illustration. Before inserting the set screw, apply Loctite 425 to the set screw threads. Insert the screw until only two or three threads are visible.
2. Snap the cover assembly into the hinges. Close the cover.
3. The switch is normally wired open in series with the cover lever switch that is also normally open. Connect an ohmmeter across the black and white wires, Positions 3 and 4 on the six-pin wire harness connector (J6). The cover lever switch must be closed in order for the ohmmeter to register the closing of the cover open switch. As you turn the set screw counterclockwise, the switch will actuate and the meter reading will switch from open circuit to a very small resistance. Turn the set screw an additional 1/2 turn (180°).

Note: Before the adjustment, you must remove the shrink tubing from the cover open switch lever. This will provide access to the hole in the lever through which the hex driver can get at the set screw.

Replace the shrink tubing after adjusting the set screw.

REPLACING THE PRINT HEAD



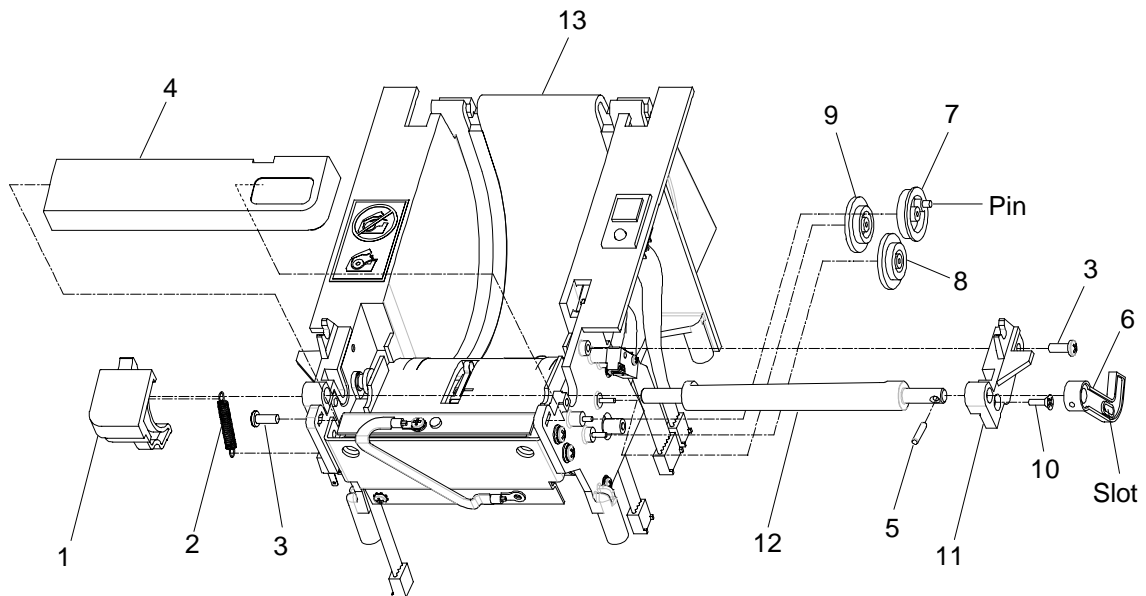


1. Remove the outer housing. (See page 27).
2. Flip the printer upside down and remove the bottom screw (1 on page 32 view).
3. From the front, remove the two screws (2 on page 32 view) and two washers (3 on page 32 view). The ESD shield should easily come off.
4. Remove the ribbon cable assembly (6 on page 32 view).
5. Remove the two head retaining screws (1 on page 33 view).
6. Open the cover, and lower the thermal print head (2 on page 33 view) and paper guide (3 on page 33 view) from the bottom of the printer.

Note on installing the thermal print head

When installing the thermal print head (2 on page 33 view), be sure to properly align the two print head alignment slots with the holes in the printer before installing the two head retaining screws (1 on page 33 view).

REPLACING THE CUTTER

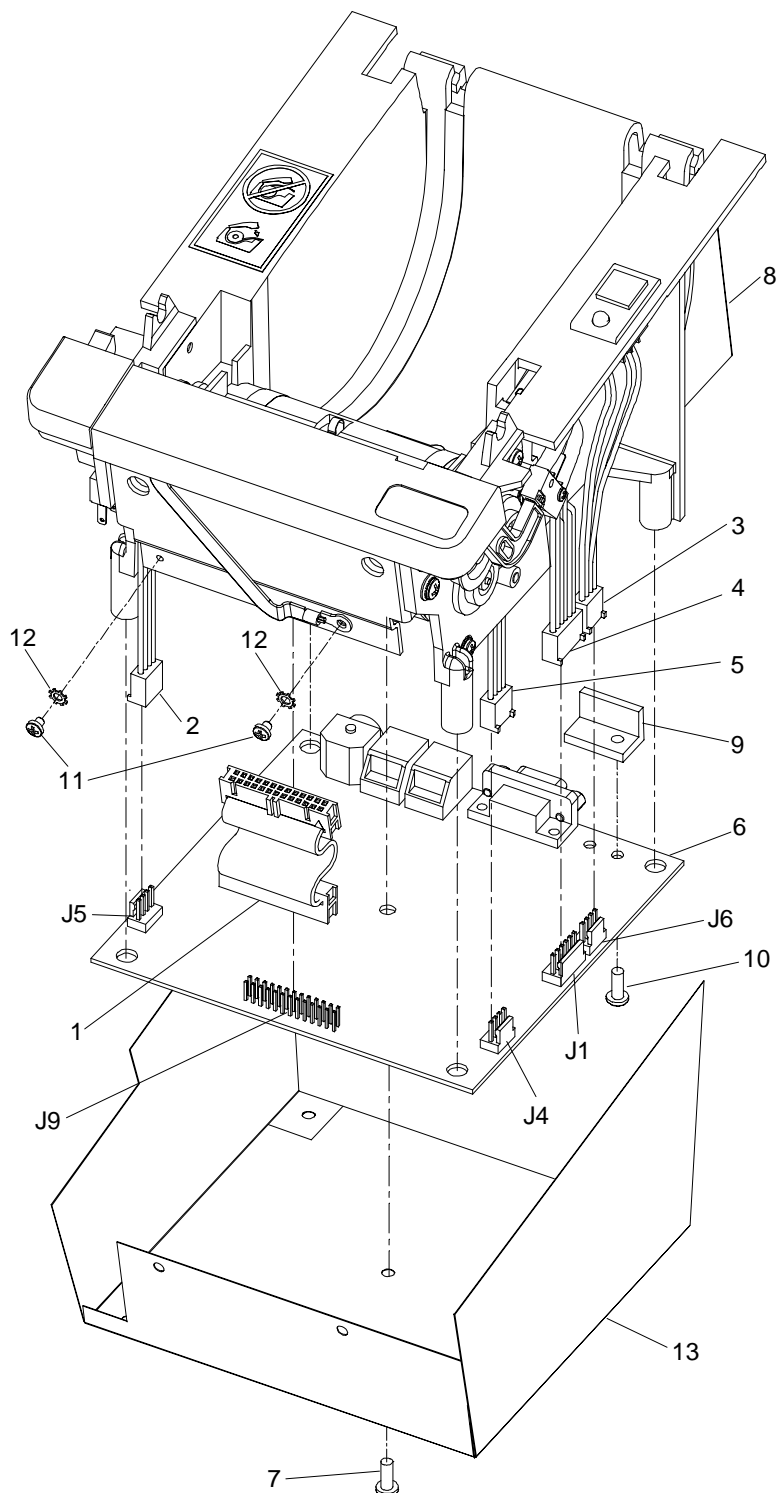


1. Remove the outer housing. (See page 27).
2. Slide the cover lever/pin assembly (1) to the left beyond the cutter shaft. Detach the extension spring (2) from the pin on the inner housing and the pin on the cover lever.
3. Remove the bezel (4) by removing the Phillips screw (3), and slide the bezel to the right until it is released.
4. Remove the spring pin (5) by carefully tapping it out of the cutter lever (6) and the round cutter (12) with a hammer and small punch.
5. Slide the cutter lever (6) off the end of the round cutter (12).
6. Remove the three gears [24 tooth gear (7), 36/18 gear (8), and 45/24 tooth gear (9)] from the outer housing.
7. Unscrew the Phillips flat head screw (10) and the Phillips screw (3), and remove the right end block (11) from the outer housing.
8. Slide the round cutter (12) to the right until it is free from the inner housing assembly (13).

Notes on installing the right end block

Attach the right end block (11) with the Phillips flat head screw (10) towards the front of the printer.

REMOVING THE CONTROLLER BOARD ASSEMBLY



1. Remove the outer housing. (See page 27).

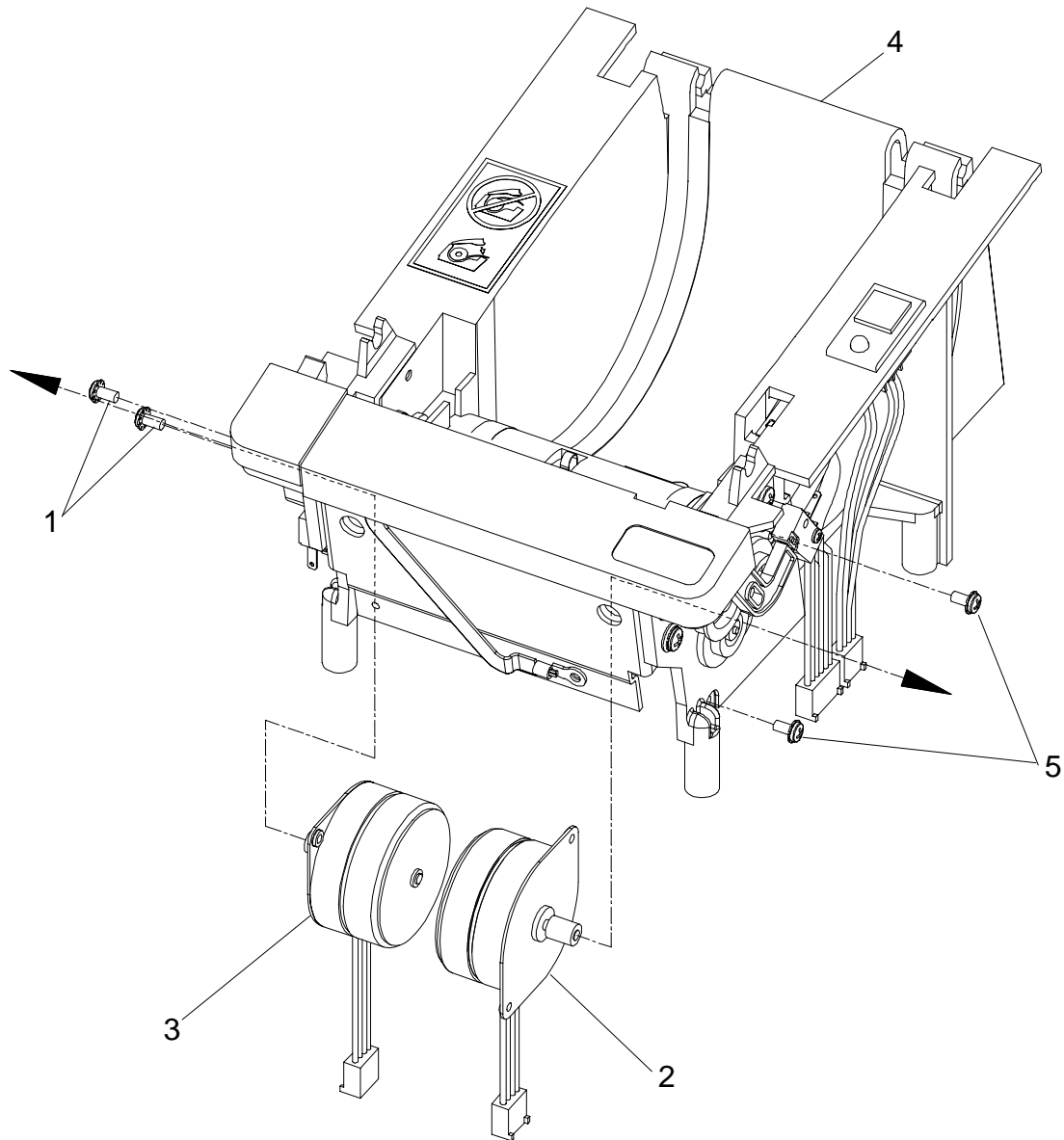
2. Disconnect the connectors (1, 2, 3, 4, and 5) from the controller board (6). See the chart below for connector locations.
3. Turn the printer over. Unscrew the Phillips screw (7) holding the controller board (6) to the inner housing (8).
4. Remove two screws (11) and two washers (12) from the front of the printer before trying to separate the controller board (6) from the inner housing (8).

***Notes on replacing the controller board assembly
(9-pin communication connector only):***

When replacing the controller board (6), remove the board spacer (9) from the old board and attach it to the new controller board. The spacer is held on the controller board by one Phillips screw (10).

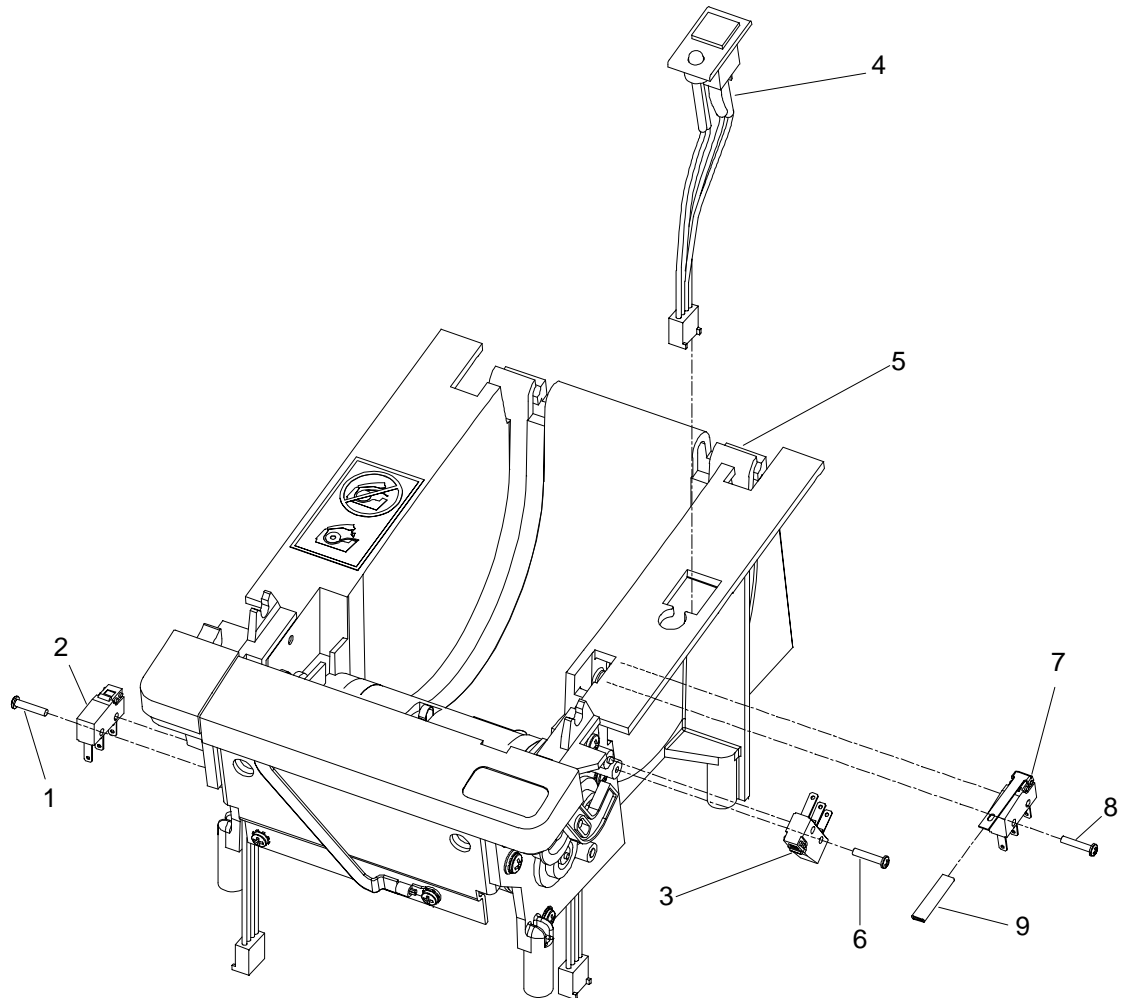
Connector/Harness	Controller Board Location
Ribbon Cable Assembly	J9
Paper Feed Stepper Motor Cable	J5
Switch and LED Assembly Harness	J6
Switch Wire Harness	J1
Cutter Stepper Motor Cable	J4

REPLACING THE STEPPER MOTORS

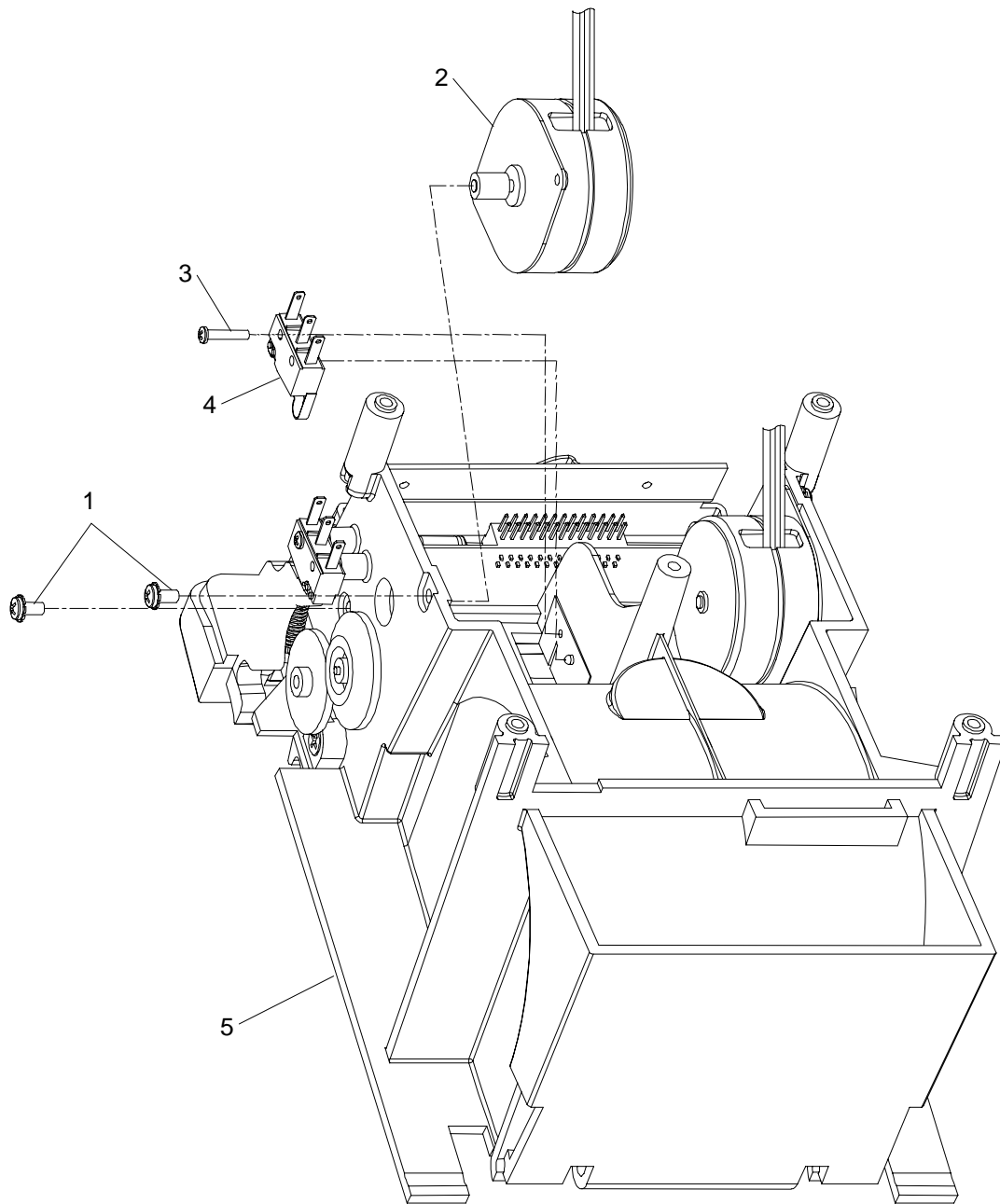


1. Remove the controller board assembly. (See page 36).
2. Remove the paper feed stepper motor (3). Unscrew the Phillips screws (1) holding the paper feed stepper motor to the outer housing (4).
3. Remove the cutter stepper motor (2). Unscrew the two Phillips screws (5) holding the cutter stepper motor to the outer housing (4)

REPLACING THE SENSORS AND KEYBOARD ASSEMBLY

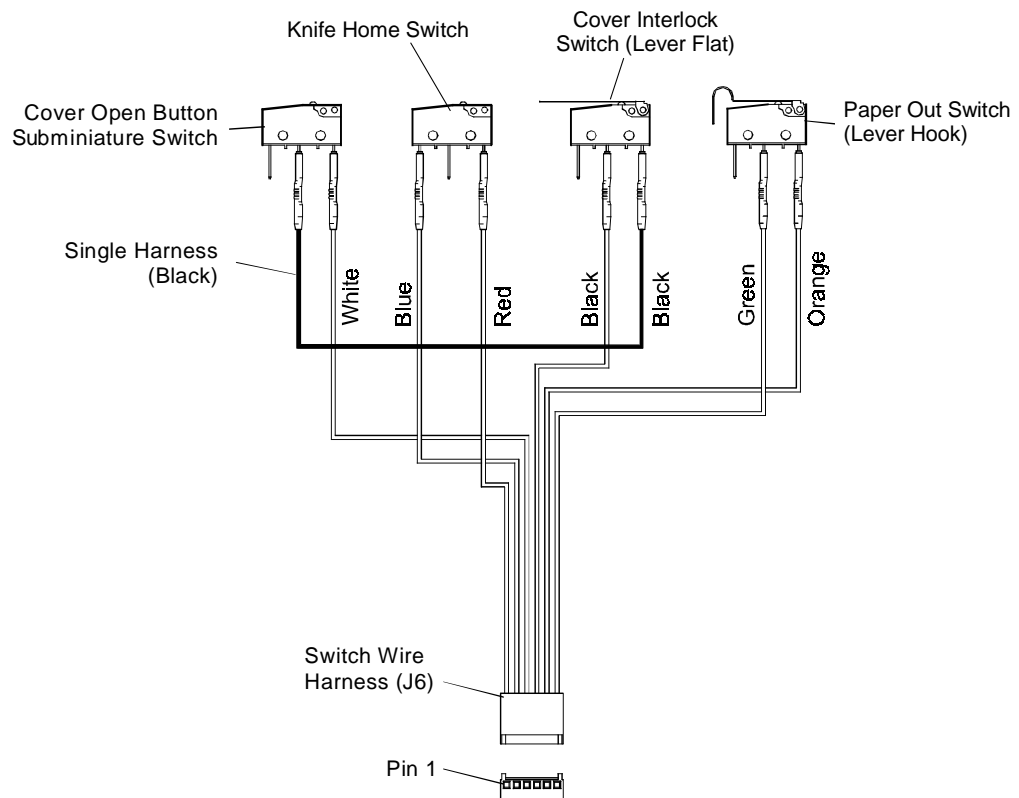


1. Remove the controller board assembly. (See page 36).
2. Remove the keypad assembly (4) from the inner housing (5) by pushing the keypad up through the hole in the inner housing.
3. To remove the cover, open the button subminiature switch (2). Unplug the black single harness wire and the white wire of the switch wire harness from the tabs on the switch. Unscrew the screw (1) holding the switch to the inner housing (5).
4. To remove the knife subminiature switch (3), unplug the blue and red wires of the switch wire harness from the tabs on the switch. Unscrew the screw (6) holding the switch to the inner housing (5).
5. To remove the cover interlock switch/flat lever assembly (7), unplug the black single harness wire and the black wire of the switch wire harness from the tabs on the switch. Unscrew the screw (8) holding the switch to the inner housing (5).



6. To remove the paper exhaust switch/hook lever assembly (4), you must first remove the paper feed motor (2). To do this, unscrew the Philips screws (1) holding the paper feed stepper motor to the outer housing (5). Unplug the green and orange wires of the switch wire harness from the tabs on the switch. Unscrew the screw (3) holding the switch to the inner housing (5).

Note on installation

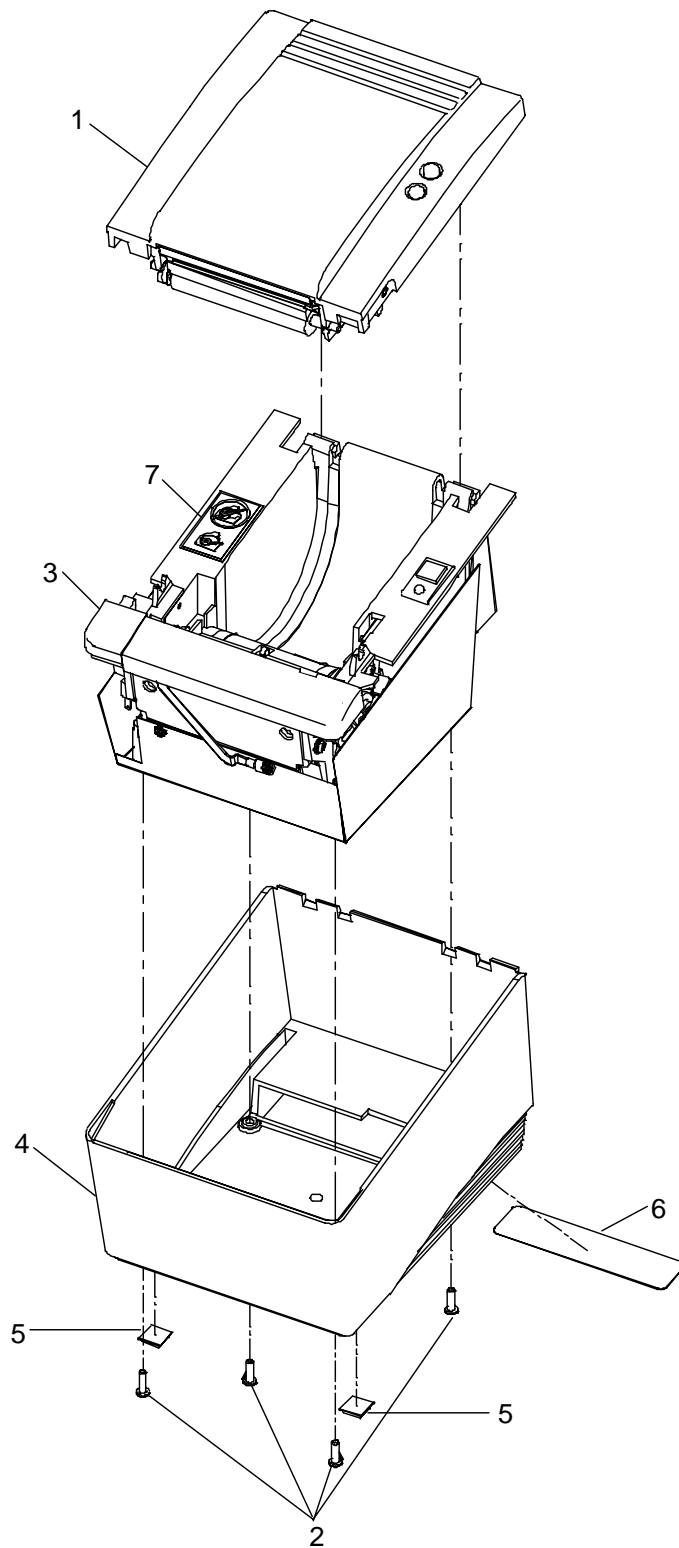


Refer to the above diagram for the correct switch connectors.

APPENDIX A: PARTS LISTS

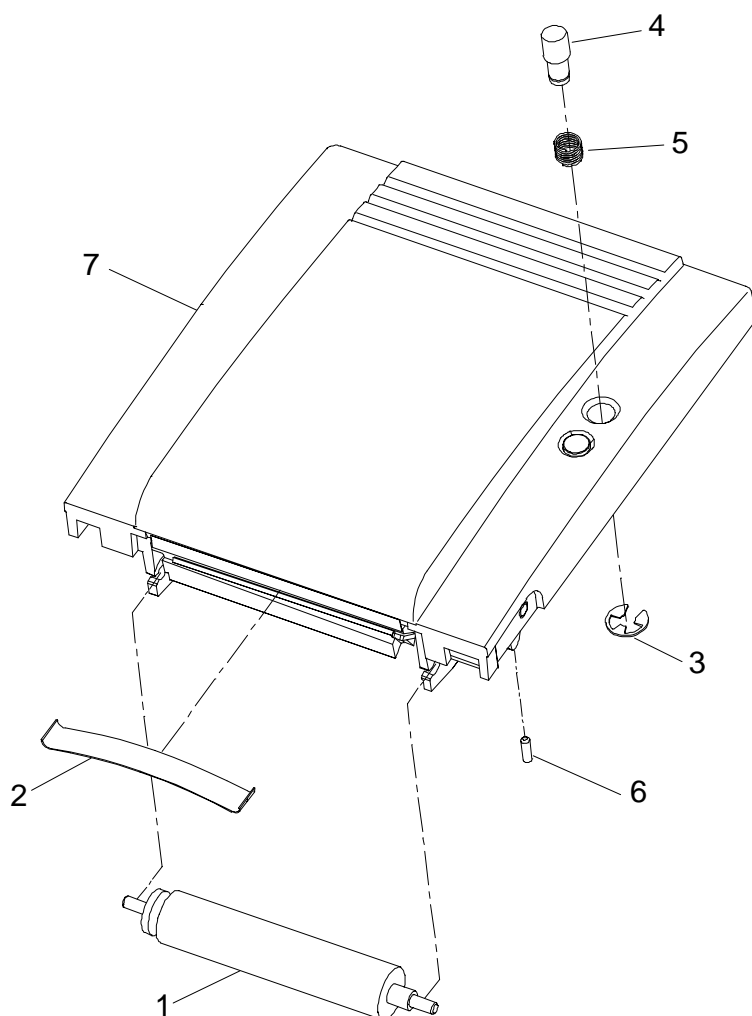
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	98-5800	1	Supply – Series 80PLUS Printer (Spill proof)
1	80-01046	1	Supply – Series 80PLUS Printer (48 watts)
2	06-0561	1	Cord – 110V
2	06-0806	1	Cord – 230V 10A
2	98-1162	1	Cord – 220V Australian
2	98-2173	1	Cord – 230V India/South Africa
2	98-7891	1	Cord – 240V United Kingdom
2	80-01101	1	Cord – 110V
3	80-01047	1	Roll – Small Thermal
4	80-01036	1	Carton – Ithaca
4	80-01055	1	Carton – White
4	80-01251	1	Carton – OKI
5	80-01056	1	Foam set
6	80-01100	1	Insert – Pack set
7	80-01076	1	Form – Series 80PLUS Supplies
8	100-01086	1	Guide – Operator's
9	91-045	1	Sheet – Warranty

PRINTER ASSEMBLY



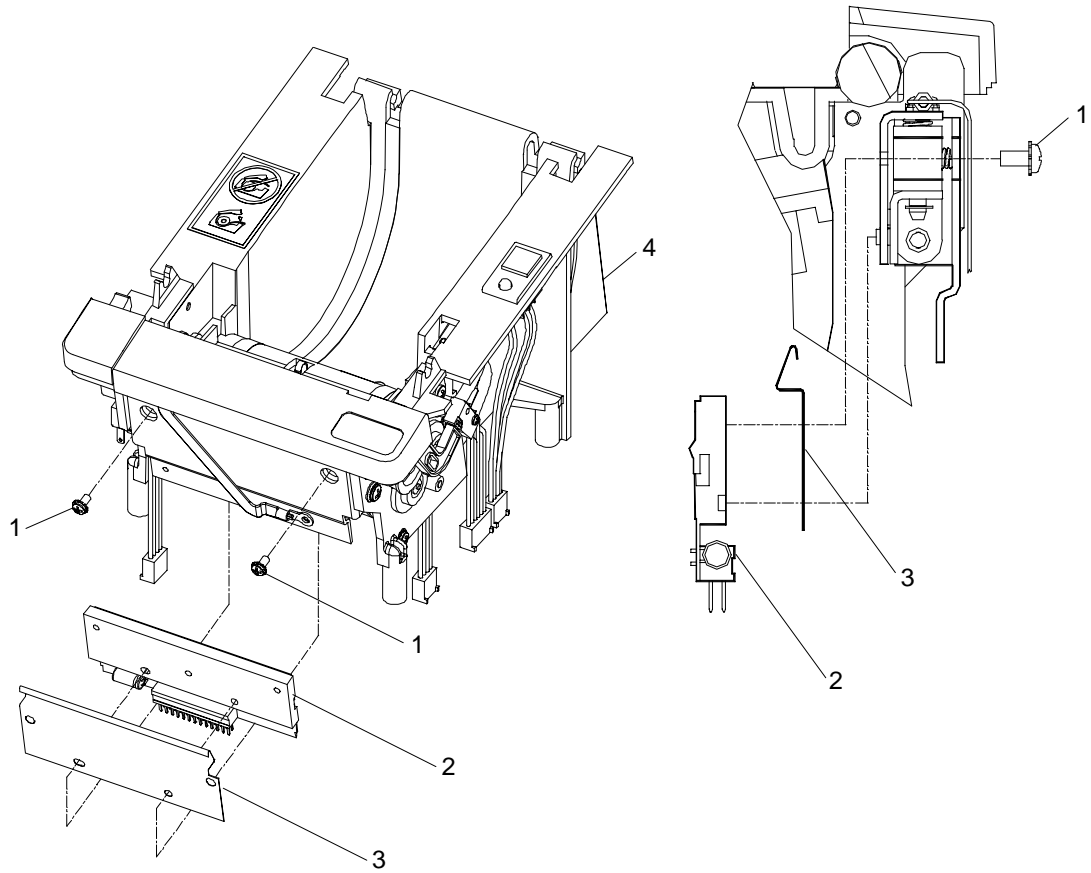
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00035	1	Assembly – Cover (No Platen), Light Gray
1	R80-00056	1	Assembly – Cover (No Platen), Dark Gray
2	R80-00043	4	Screw #6 – 18 x ½ PHPS Tap
3		1	Assembly – Inner Housing
4	R80-00034	1	Housing – Outer, Light Gray
4	R80-00057	1	Housing – Outer, Dark Gray
5	R80-00032	2	Bumper – Rubber Feet
6	R80-00044	1	Label – I.D. and Agency
7	R80-00030	1	Label – Paper Load

COVER AND PLATEN



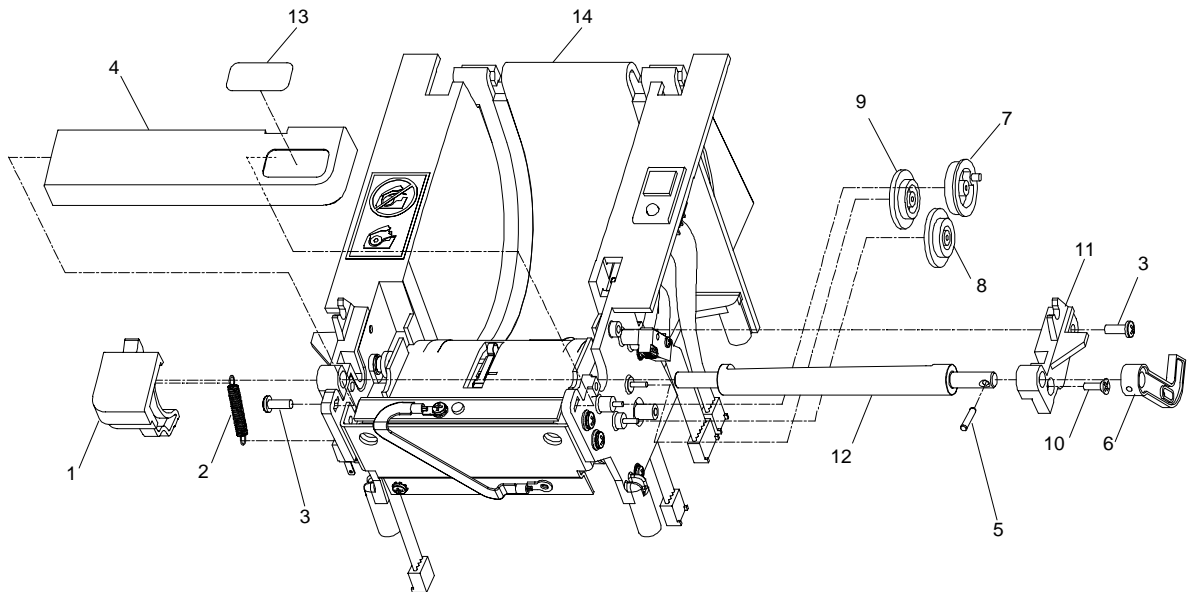
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00045	1	Assembly – Platen and Gear
2	R80-00005	1	Spring – Cutter
3	520-9800006	1	Ring – Retaining
4	R80-00046	1	Button – Paper Feed, Dark Gray
4	R80-00058	1	Button – Paper Feed, Light Gray
5	R80-00002	1	Spring – Compression
6	R80-00004	1	Screw – #4 - 40 x 3/8 Socket
7	R80-00066	1	Assembly – Cover (No Platen), Light Gray
7	R80-00056	1	Assembly – Cover (No Platen), Dark Gray

PRINT HEAD



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00026	2	Screw – M3 x 6 mm PHPS SEMS
2	R80-00008	1	Print head – Thermal
3	R80-00047	1	Guide – Paper
4		1	Assembly – Inner Housing

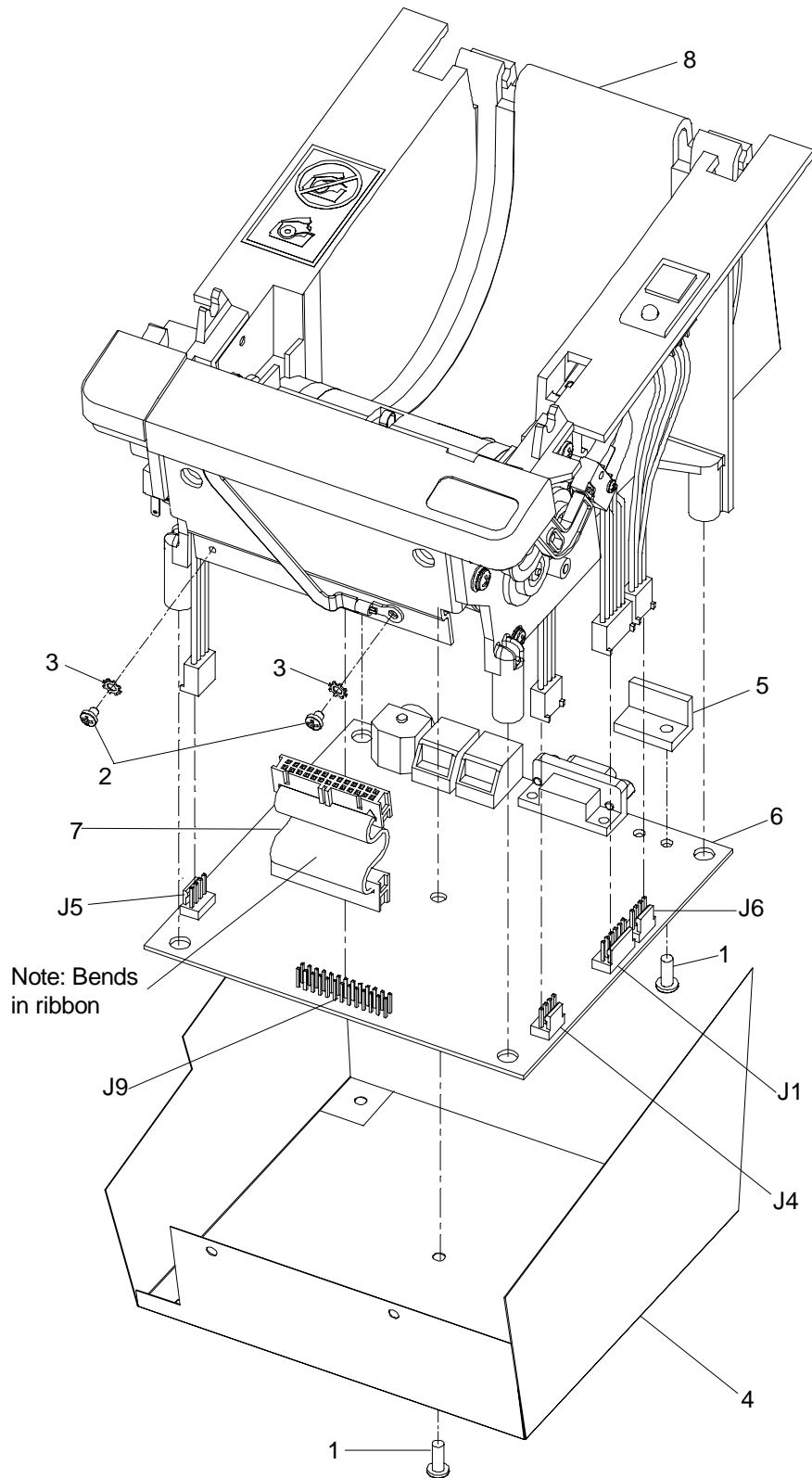
CUTTER



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00027	1	Assembly – Cover Lever and Pin, Dark Gray
1	R80-00059	1	Assembly – Cover Lever and Pin, Light Gray
2	R80-00024	1	Spring – Extension
3	R80-00033	2	Screw #6 - 18 x 3/8 PHPS Tap
4	R80-00028	1	Bezel – Front, Light Gray*
4	R80-00060	1	Bezel – Front, Dark Gray*
5	R80-00010	1	Pin – Spring 0.094 x 0.50 lg
6	R80-00067	1	Lever – Cutter 40°
7	R80-00016	1	Gear – 24 Tooth with Pin
8	R80-00015	1	Gear – 36/18 Tooth
9	R80-00014	1	Gear – 45/24 Tooth
10	R80-00000	1	Screw – #6 - 18 x 3/8 PHPS Tap
11	R80-00019	1	Block – Right End
12	R80-00048	1	Cutter – Round
13	80-01021	1	Label, Ithaca
13	R80-01078	1	Label, UTC
13	80-01252	1	Label, OKI Europe
14		1	Assembly – Inner Housing

* Order Item 13 when ordering Item 4.

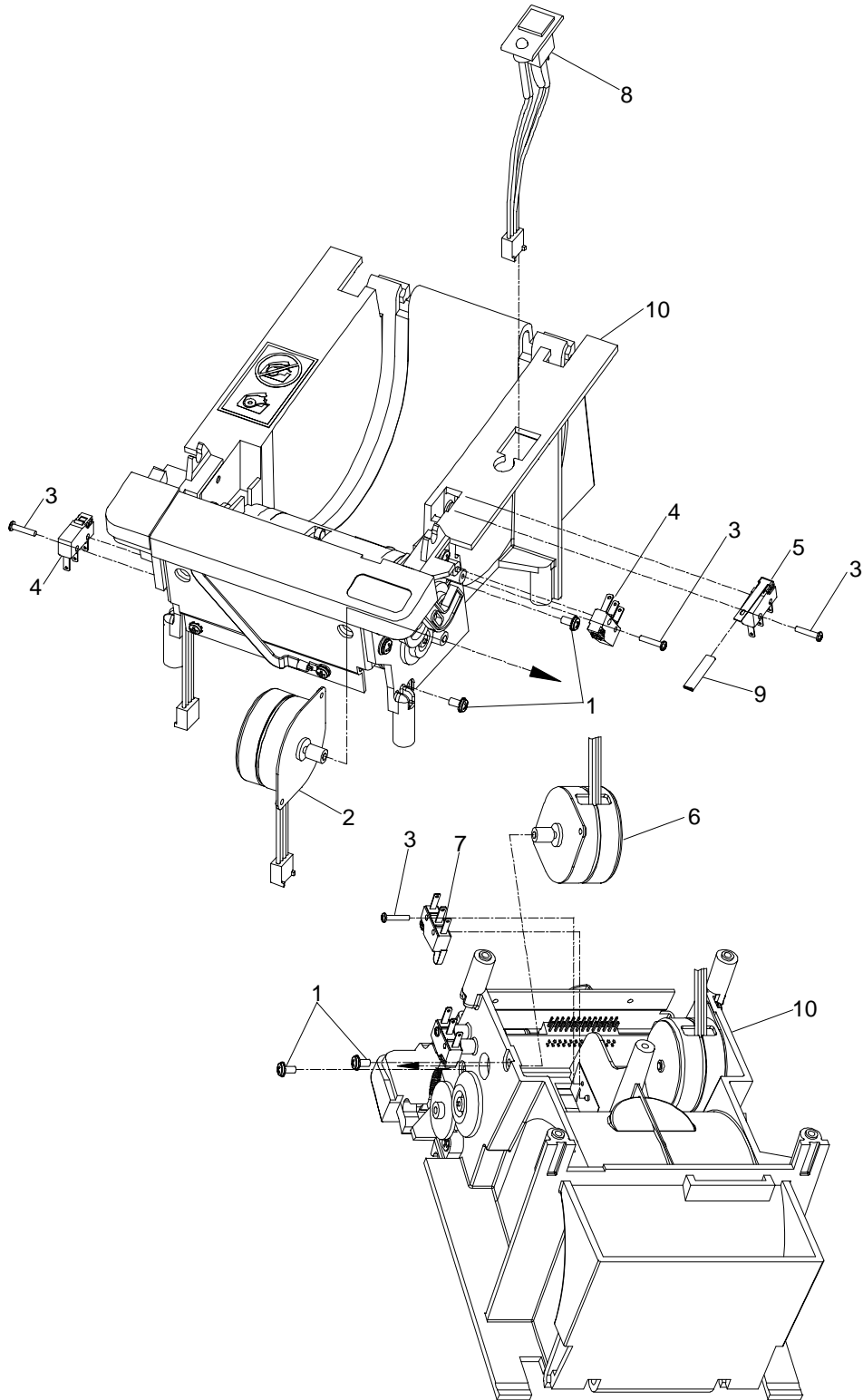
CONTROLLER BOARD



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00033	2	Screw – #6 - 18 x 3/8 PHPS Tap
2	R80-00049	2	Screw – #4 - 40 x 1/8 PHP
3	R80-00050	2	Washer – #4 External Tooth
4	R80-00051	1	Shield – Ground
5	R80-00013	1	Spacer – P.C. Board (Serial)
6	R80-00065	1	Controller Board – Serial
6	R80-00064	1	Controller Board – Parallel
6	R80-00061	1	Controller Board – Serial with Audible Buzzer
6	R80-00062	1	Controller Board – Parallel with Audible Buzzer
7	R80-00068	1	Assembly – Ribbon Cable
8		1	Assembly – Inner Housing

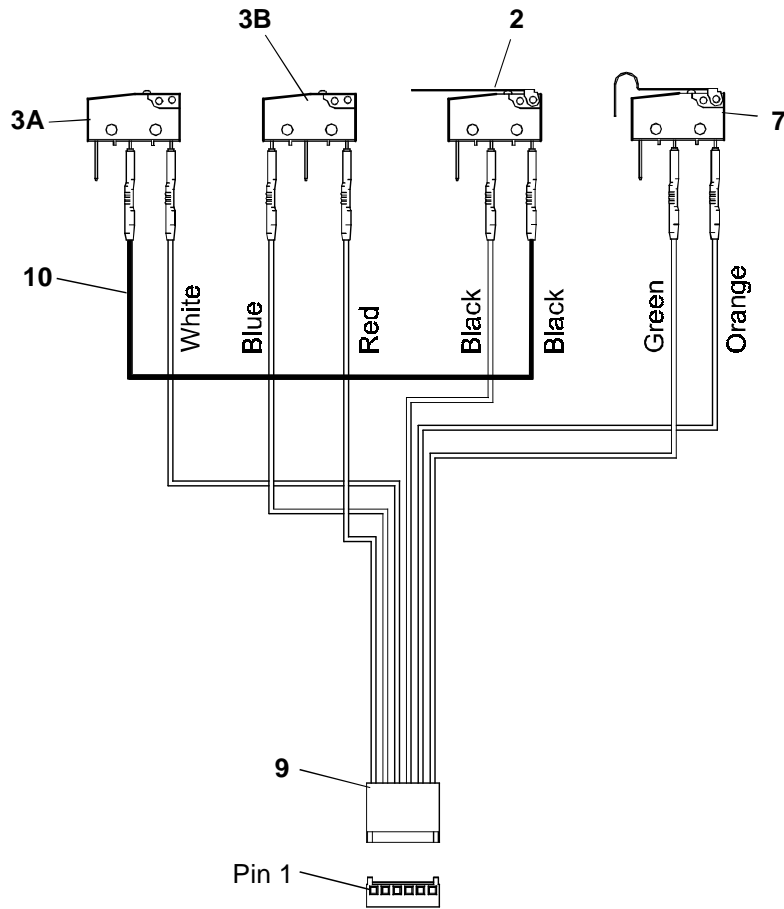
Connector/Harness	Controller Board Location
Ribbon Cable Assembly	J9
Paper Feed Stepper Motor Cable	J5
Switch and LED Assembly Harness	J6
Switch Wire Harness	J1
Cutter Stepper Motor Cable	J4

MOTORS AND SWITCHES



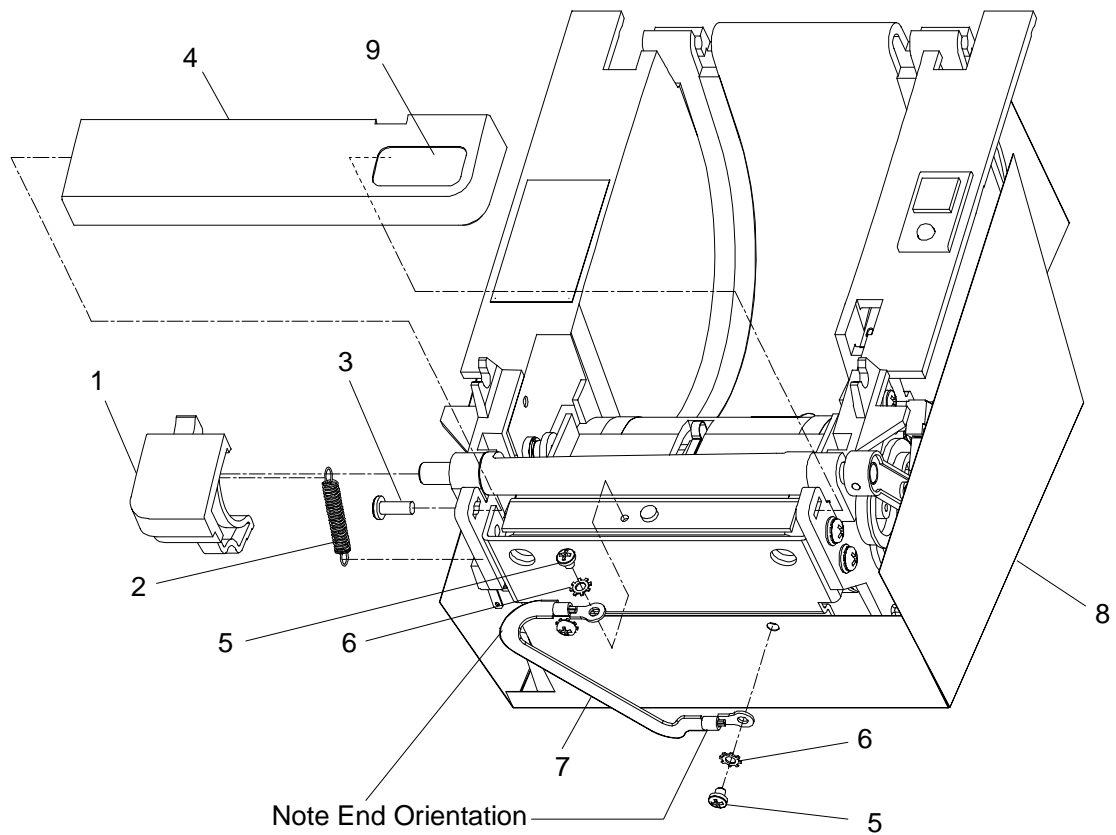
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00026	4	Screw – M3 x 0.5 x 6 mm PHPS SEM
2	R80-00020	1	Motor – Stepper 7.5" (Cutter)
3	R80-00022	4	Screw – #2 - 28 x 7/16 PHPS Tap
4	R80-00025	2	Switch – Subminiature
5	R80-00018	1	Assembly – Switch and Flat Lever
6	R80-00052	1	Motor – Stepper 7.5" (Paper feed)
7	R80-00009	1	Assembly – Switch and Hook Lever
8	R80-00021	1	Assembly – Paper Feed Switch/LED
9	R80-00053	1	Tubing – Heat Shrink 0.80 Lg
10		1	Assembly – Inner Housing

SWITCH WIRING DETAIL



ITEM NO.	PART NO.	QTY.	DESCRIPTION
2	R80-00018	1	Assembly – Switch and Flat Lever
3A	R80-00025	1	Switch – Subminiature (Cover Open Bottom)
3B	R80-00025	1	Switch – Subminiature (Knife Home)
7	R80-00009	1	Assembly – Switch/Lever Hook
9	R80-00023	1	Assembly – Wire Harness
10	R80-00007	1	Assembly – Wire Harness (Single)

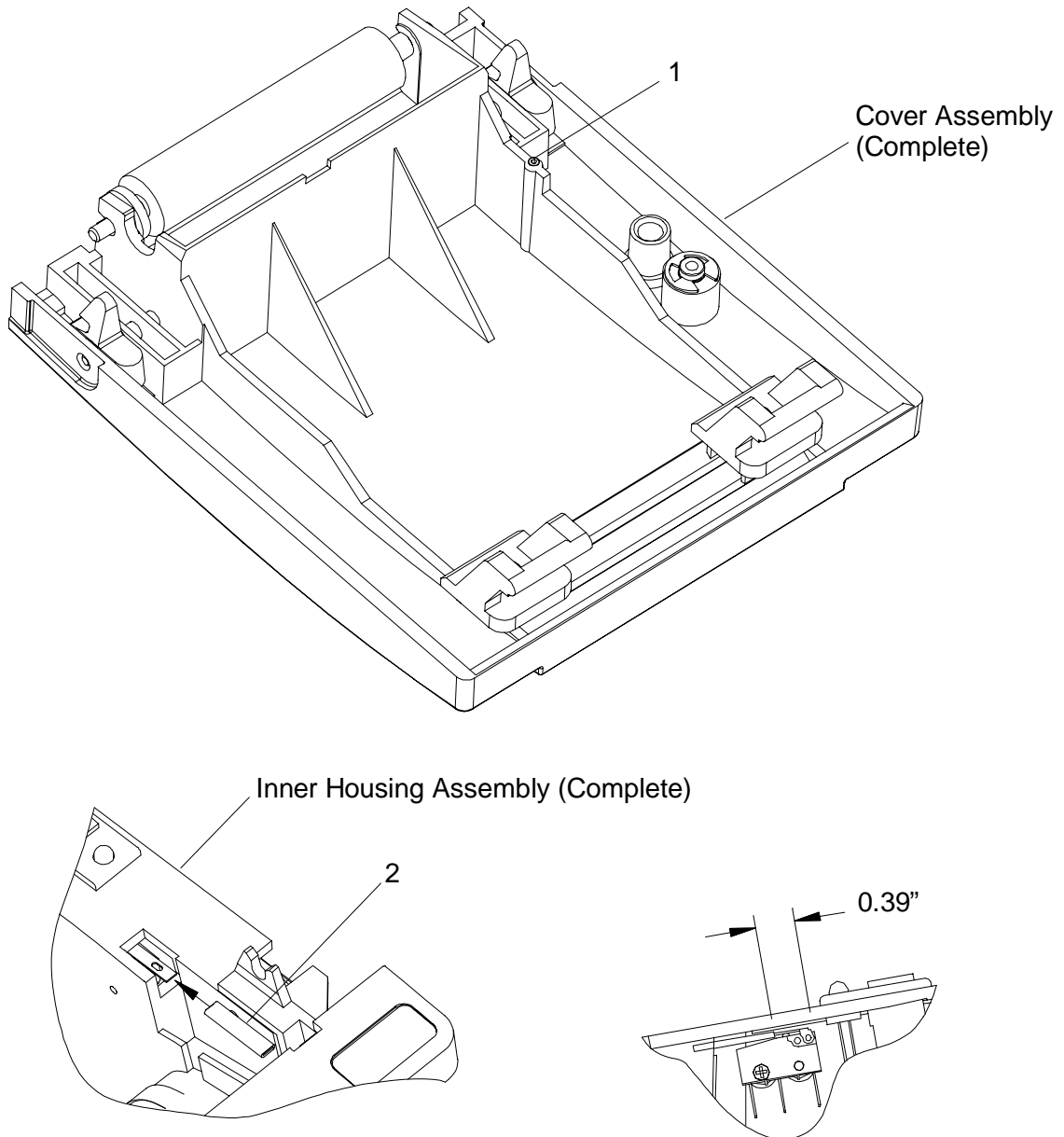
Note: Shrink tube on cover open switch to be applied after set screw adjustment.



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	R80-00027	1	Assembly – Cover Lever and Pin, Dark Gray
1	R80-00059	1	Assembly – Cover Lever and Pin, Light Gray
2	R80-00024	1	Spring – Extension
3	R80-00033	1	Screw – #6 - 18 x 3/8 PHPS Tap
4	R80-00028	1	Bezel – Front, Light Gray*
4	R80-00060	1	Bezel – Front, Dark Gray*
5	R80-00049	2	Screw – #4 - 40 x 1/8 PHPS
6	R80-00050	2	Washer – #4 External Tooth
7	R80-00054	1	Assembly – Braided Cable
8		1	Assembly – Inner Housing
9	80-01021	1	Label, Ithaca
9	R80-01078	1	Label, UTC
9	80-01252	1	Label, OKI Europe

* Order Item 9 when ordering Item 4.

Adjust set screw on cover assembly, cover assembled to inner housing, apply tubing and heat shrink as shown.



ITEM NO.	PART NO.	QTY.	DESCRIPTION
		1	Assembly – Cover (Complete)
		1	Assembly – Inner Housing (Complete)
1	R80-00055	1	Screw – #4 - 40 Set
2	R80-00053	1	Tubing – Heat Shrink 0.80 Lg

APPENDIX B: SCHEMATICS

